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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US98/06956 <b>(22) International Filing Date:</b> 10 April 1998 (10.04.98) <b>(30) Priority Data:</b> 08/837,312 10 April 1997 (10.04.97) US <b>(71) Applicant:</b> GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). <b>(72) Inventors:</b> JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). <b>(74) Agent:</b> SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).			<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>
<b>(54) Title:</b> SECRETED EXPRESSED SEQUENCE TAGS (sESTs)			
<b>(57) Abstract</b>  Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.			



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## SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

### SUMMARY OF THE INVENTION

5           The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide  
 consisting of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;  
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

#### DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32		62	DY307	93	DY611
5	2	BV216	DW1001		63	DY643	94	EC259
	3	BV274	33	DW831	64	DY656	95	DY711
	4	BV48	34	DW859	65	DY675	96	EC248
	5	DN351	35	DW875	66	DY988	97	EC32
	6	DN381	36	DW888	67	DY992	98	DO703
10	7	DN405	37	DW901	68	DY225	99	DO713
	8	DU651	38	DW902	69	DY236	100	DR294
	9	DU660	39	DW904	70	DY242	101	DY1
	10	DU675	40	DW905	71	DY254	102	DY10
	11	DU684	41	DW906	72	DY914	103	DY106
15	12	DD364	42	DW929	73	DY946	104	DY117
	13	DD379	43	DW981	74	DY955	105	DY148
	14	DD389	44	DX191	75	DY959	106	DY167
	15	DD401	45	DX219	76	DY961	107	DY17
	16	DD413	46	DX245	77	DY981	108	DY174
20	17	DD426	47	DX256	78	DY357	109	DY175
	18	DD428	48	DX267	79	DY358	110	DY178
	19	DN293	49	DX66	80	DY381	111	DY23
	20	DD454	50	DX81	81	DY413	112	DY27
	21	DD472	51	DY780	82	DY414	113	DY41
25	22	DD475	52	DY803	83	DY415	114	DY42
	23	DT306	53	DY809	84	DY431	115	DY8
	24	DW282	54	DY814	85	DY433	116	DY93
	25	DW300	55	DY261	86	DY436	117	EB107
	26	DW303	56	DY264	87	DY543	118	EB113
30	27	DW323	57	DY266	88	DY565	119	EB163
	28	DT258	58	DY271	89	DY585	120	EB25
	29	DW246	59	DY287	90	DY331	121	EB77
	30	DW324	60	DY297	91	DY586	122	EC172
	31	DW333	61	DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94



	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		



The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification  
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that  
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making  
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the  
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,  
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) <sup>2</sup>	Hybridization Temperature and Buffer <sup>1</sup>	Wash Temperature and Buffer <sup>1</sup>
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T <sub>B</sub> *; 1xSSC	T <sub>B</sub> *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T <sub>D</sub> *; 1xSSC	T <sub>D</sub> *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T <sub>F</sub> *; 1xSSC	T <sub>F</sub> *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T <sub>H</sub> *; 4xSSC	T <sub>H</sub> *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T <sub>J</sub> *; 4xSSC	T <sub>J</sub> *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T <sub>L</sub> *; 2xSSC	T <sub>L</sub> *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T <sub>N</sub> *; 6xSSC	T <sub>N</sub> *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T <sub>P</sub> *; 6xSSC	T <sub>P</sub> *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T <sub>R</sub> *; 4xSSC	T <sub>R</sub> *; 4xSSC

‡: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

‡: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH<sub>2</sub>PO<sub>4</sub>, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

\*T<sub>B</sub> - T<sub>R</sub>: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T<sub>m</sub>) of the hybrid, where T<sub>m</sub> is determined according to the following equations. For hybrids less than 18 base pairs in length, T<sub>m</sub>(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T<sub>m</sub>(°C) = 81.5 + 16.6(log [Na<sup>+</sup>]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na<sup>+</sup>] is the concentration of sodium ions in the hybridization buffer ([Na<sup>+</sup>] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~

polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any  
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of  
25 expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting  
30 expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

### USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention  
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

#### Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or  
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding  
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related  
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-  
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify



polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand.. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

#### Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

#### Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon  $\gamma$ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta. A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

#### Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other  
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune  
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from  
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing  
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys  
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the  
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythmatosis in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient  
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding  
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably  
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor  
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection  
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or  
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I  $\alpha$  chain protein and  $\beta_2$  microglobulin protein or an MHC class II  $\alpha$  chain protein and an MHC class II  $\beta$  chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected

5 with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured

10 by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

15 3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa

20 et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnoli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching

25 (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

30 Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins  
 5 expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science  
 10 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate  
 15 lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

20 Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

#### 25 Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and  
 30 proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for



example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*, R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

#### Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma  
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of  
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the  
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein  
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured  
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium ).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,  
20 alone or in heterodimers with a member of the inhibin  $\alpha$  family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- $\beta$  group, may  
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

#### Chemotactic/Chemokinetic Activity

5       A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide  
10   particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

      A protein or peptide has chemotactic activity for a particular cell population if it can  
15   stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20       The activity of a protein of the invention may, among other means, be measured by the following methods:

      Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one  
25   cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et  
30   al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

#### Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A  
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors  
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.  
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those  
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

#### Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or  
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,  
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

#### Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor  
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

#### Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the  
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent  
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for  
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20



### ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5           The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like.  
10           Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15           As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,  
20           administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

          In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a  
25           mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either  
30           simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous  
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an  
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain  
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical  
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,  
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01  $\mu$ g to about 100 mg (preferably about 0.1 ng to about 10 mg, more preferably about 0.1  $\mu$ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also  
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and  
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices  
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such as  
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- $\alpha$  and TGF- $\beta$ ), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2



BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Jacobs, Kenneth  
McCoy, John  
LaVallie, Edward  
Racie, Lisa  
Merberg, David  
Treacy, Maurice  
Spaulding, Vikki  
Agostino, Michael
- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1519
- (iv) CORRESPONDENCE ADDRESS
  - (A) ADDRESSE: Genetics Institute, Inc.
  - (B) STREET: 87 CambridgePark Drive
  - (C) CITY: Cambridge
  - (D) STATE: Massachusetts
  - (E) COUNTRY: U.S.A
  - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy Disk
  - (B) COMPUTER: IBM PC Compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Brown, Scott A.
  - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: (617) 498-8224
  - (B) TELEFAX: (617) 876-5851

## (2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```

GGAGATGTTG AGGTGGCTGC TGACCTGGG TCTCATCTCC TTGATTTTCT TTATCTTCTT      60
CATTGCCGTC CTCTCTAGGC TGTCTTTGGC GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT      120
ATCCCCGATA CATATTCTGC CTCCTGGTAC TACCTTGTTT TCCTGCACCC TGGTTGTCAG      180
CACCTCCAT CACTTCTCCC TGCACAGGAG GGTGGAATA CTGTGGTCGA CGCCCATAGG      240

```

```

GTCTCCGCAT GTAGTAAGGT GGAACCTTC GCCTGCGGTA GGGCCGGCGT TGTTGGGCCT    300
GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT    360
TTTGCTGGTA ATTGCGTGGA GGAGAACAGG TAGACTCGAG                            400

```

## (2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 165 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

```

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC    60
TTTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCCCGCAT TTTCTTACGT CAACATTCTT    120
TCCAGGATGA TGAATGGACT GTTCTCTTTG GCCCCCTATC TCGAG                    165

```

## (2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

```

GAATTCTAGA CCTTCCTCTC CTAATCCCTT CTTAGGCTC CTGAACCTGT TTGCTCCTAA    60
ATCTTGTTAA TTCTTTTCTT CTGGATTTTG GTTCTTTTGG GCTTTCCTT GCCTTCCCCT    120
TTCTCTGTCT CCAACACTCT TTCCCATGT CTTTCTGGCT GTCTCTATGT TCCTCTTCTC    180
TTATCCTCAA CTTTCTGTCC ATTCGGGCCT CCTCCCCACC TCCCACGCCC CAGCCCCTCC    240
CTCCTTGGTC TCCTTTTCGA TATGCCAAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG    299

```

## (2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

```

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTA    60
ATGACTAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC    120
TTAATTTTCT AAGATTATGT AAAGGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC    180
AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTATATCT TGCAGCAACG CACATCTCGA    240
G                                                                    241

```

## (2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCGGCC	TTCATGGCCT	AGGAAATGAC	TTTATTGTGG	TTGAATTAGT	TAAAGGGTAC	60
TTACATTACG	TGTTTGATTT	GGGAAATGGT	GCTAACCTCA	TCAAAGGAAG	CTCAAATAAA	120
CCTCTCAATG	ACAATCAGTG	GCACAACGTG	ATGATATCAA	GGGACACCAG	CAACCTCCAC	180
ACTGTAAAGA	TTGACACAAA	AATCACAACG	CAAATCACCG	CCGGAGCCAG	GAACCTAGAC	240
CTCAAGAGTG	ACTTATATAT	AGGAGGAGTA	GCTAAAGAAA	CATACAAATC	CTTACCAAAA	300
CTTGATCATG	CCAAGAAGG	CTTCAAGGC	TGCTGGCAT	CAGTTGATTT	AAATGGACGG	360
CTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCGGCC	TTCATGGCCT	ATAAAATTTA	AAAATGCTAA	GGATCTGGCC	CCACAGGCCC	60
CAAAGCTTTC	ACAGAGCTCC	TCTTAGACAT	GAAGATGCCC	ATTGGCCTCC	TAGGTCCCAG	120
GAGGTGTGGG	CAGGACTGCC	CTTCCTCCGT	TCTCATTGCG	GGGCTCCTGA	AGGGGGTATC	180
TGAAAGTATG	TAAATCTGAT	GGGAGGTCTG	ATCCTCCTTT	TGCTAGCCCC	TGAACTCTGT	240
GGTGGAGTCT	GGCTGATGGC	CAGGGCCATG	TCCTAGAGGG	GACTCCCCCTG	CAGGAGGCGG	300
GCTCTAAAGG	GAGTGGTGTC	CCTTTAGGCC	AGGGTTCACA	GTCTGGGTGG	TCTGGAGACT	360
GCAGGACTCA	GGGCCTGGGG	GTGGCATCAG	TCTGGCCAGG	CCCTGCGTCA	CTTGACCCCA	420
CTGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GGGTGGCTCA	TGCCTGTAAT	CCCGGCACTT	GGGTAGGCCA	GGGCAGCAGG	ATCGCTTGAG	60
CCCGGGAGTT	CGAGACAGCC	TGGGCAACAT	GGTGAGACCC	TGTCTCCATA	AAATTTTATA	120
AAAAATTGCC	AGGTGTGGTC	GTGTGTGCCT	GTGAGGCTGA	GGTGGGAGGC	TCGCTTGAGC	180
CCAGGGGTCA	AGGCTGCAGT	GAGCCATGAC	TGCACGCCAC	TGCACTCCAG	CGTGGGTGAC	240
AGAGTGAGAT	ACTGTATAAA	AAAAAAAAGC	TAAAAACAAA	CAAGAAGTAT	TATCTTAAGC	300
ATGTTATTTA	GAAATATGGA	GATAAATAAA	AATAACTGAA	AGTAGGTCGT	TGCTTCTGAG	360
GAGAGAAATT	GGGAGTTGGC	AAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:8:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GCTTTTGGAG CTGCTAAAAT GCCGGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG      60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTGTTGAAA      120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTGAGCAA      180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAAGAAT CTGACACTGG CCTGGCCCCA      240
CCAGCACTCT GGGATTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG      300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTCGGAGG ACCCACTCGA G      351

```

## (2) INFORMATION FOR SEQ ID NO:9:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GTGATGTGTC ACCCCAAGTG CTCCAGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA      60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAA TGAAGTCCC AGGTCTCCAG      120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGA TGAAGGTGCC CAGGAATAAC      180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCTCT      240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCCG TGGAAGAATT TGAGCTGTGC      300
CTTCCCAGC GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCAACT CGAG      354

```

## (2) INFORMATION FOR SEQ ID NO:10:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG      60
GGGAAGACGA GGAGGAGGAG GAGGCTGCGG CAGAGGCTGC CGCGGGGGCC AAACATGACG      120
ATGCCACGC CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA      180
GAAAGCCAC GAAGAAAAA GCCTGGTTTT GTTTTCCCA GAATATCGAT GGAATAAAA      240
AGGCTCAGGT TTTTGACCAA AATACAATGT GAATTATTC TGACATTCCT AAAATAGATT      300
AAATTAAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTCAT TTTGAACATA      360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CAAAATTAT GTTTTCATGG      420
TCTCTCCTCG AG      432

```

## (2) INFORMATION FOR SEQ ID NO:11:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

CTATTTTACA TGCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCTGT      60
GTCATATTTG ACTTAAAGCT TATTTGACG GGAAACCAAT TTGTCCTTTT TTTGGAAAGG    120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG    180
GAATGCTTCA CATATGTCCT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT    240
GGAACCAAAG GTCACCTTCT TGACTCCTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA    300
GATTACTTGC ACGGGACTGG ACATGGTGTT GGGTCTTTTT TGAATGTCCA TGAAGGTCCT    360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT    420
GATGAGCCCC GGTACTATGA AGATGGGGCT TTTGGAATTC GCATTGAGAA TGTGTCTCTT    480
GTGGTTCCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACTT    540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG    600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG    660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687

```

## (2) INFORMATION FOR SEQ ID NO:12:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC    120
TGTACTCCAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA    180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTTAGG CACAGACTCT GGACTCTGGA    240
TTTCCCACAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA    300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT    360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTTGAA AATTCTCGAG    420

```

## (2) INFORMATION FOR SEQ ID NO:13:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTTTGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTCTC CCAGTTGTCT    120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAAAA TTATATATAT ATTCTCCTTT    180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC    240

```

ACATACCACA GTTTCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG	300
GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTTAATT GTCTTAATTT TTTTCTATT	360
ATTAAACAAC AGGCTCGAG	379

## (2) INFORMATION FOR SEQ ID NO:14:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT	60
AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA	120
GAATATGTTT GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA	180
GAACAGATGT CCCGTGGTGA TCCATTTAAG GATATAATTT TATATGTCTA GGAGGAGATG	240
AAAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAATGAGC	300
ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTTGAAG	360
CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA	420
CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCATTTC TGAAGCCTT CCAGAAAATA	480
GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG	528

## (2) INFORMATION FOR SEQ ID NO:15:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGCTACACT CTGCCACAC TGGTGAGCAG	60
GAGGTCTTCC CACGCCCTGT CATTAGGCTG CATTACTCT TGCTAAATAA AAGTGGGAGT	120
GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CCTGCCTGCT	180
CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGCAC GGTGTTGAAC	240
TGGGACACTG GGGAGAAAGG GGCTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT	300
GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC	360
CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCTCTCG	420
AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG	466

## (2) INFORMATION FOR SEQ ID NO:16:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTCGGCC	TTCATGGCCT	AGCGTGATCC	TGGAACGTGC	TCTAGTTCGA	GAGAGTGAGG	60
GCTTTGAGGA	GCATGTACCA	TCTGATAACT	CTTGAAGATA	CAGAGAGAAA	TCCATCTTTT	120
CCCAGGTCTC	CTTCACTGAA	AACAAAAATC	TACTTACATA	CACTGTCACC	TTAGCATCAG	180
AGTCGGATTA	ATGAACTGCG	GAACAAGAGG	TTGTGAGAAT	CTAAGATGGA	ACCTTTCTTT	240
CTTTCTTTCT	TTTTTTTAA	ATTTTGTATT	TTCCATCCAA	CACTCGAG		288

## (2) INFORMATION FOR SEQ ID NO:17:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

GAATTCGGCC	TTCATGGCCT	AGGGCTCTGC	TTATAAACTT	CAAAGTTACA	CTGAAGGATA	60
CGGTAAAAAC	ACCAGTTTAG	TAACCATTTT	TATGATTGG	AATACCATGA	TGGGAACATC	120
TATACTAAGC	ATTCTTTGGG	GCATAAAACA	GGCTGGATTT	ACTACTGGAA	TGTGTGTCAT	180
CATACTGATG	GGCCTTTTAA	CACTTTATTG	CTGCTACAGA	GTAAGTAAAT	CACGGACTAT	240
GATGTTTTCA	TTGGATACCA	CTACCTGGGA	ATATCCAGAT	GTCTGCAGAC	ATTATTTCGG	300
CTCCTTTGGG	CAGTGGTCTGA	GTCTCCTCTT	CTCCTTGGTG	TCTCTCATTG	GAGCAATGAT	360
AGTTTATTGG	GTGCTTATGT	CAAATTTTCT	TTTAAATACT	GGAAAGTTTA	TTTTTAATTT	420
TATTCATCAC	ATTAATGACA	CAGACACTAT	ACTGAGTACC	AATAATAGCA	ACCCTGGTCT	480
CGAG						484

## (2) INFORMATION FOR SEQ ID NO:18:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

GAATTGGCCT	TCATGGCCTA	GGAGATATAC	CTAATGCTAG	ATGATGAGTT	AGTGGGTGCA	60
GCGCACCAGC	GTGGCACATG	TATACATATG	TAACCTAACCT	GCACAATGTG	CACATGTACC	120
CTAAACTTTA	AAGTATATAT	AAAAAAAAAA	GACNTCGCTA	GTGAGCACGC	TGTATACGAC	180
ATCGCTAATG	AGGACACCAT	ACAAGGCATC	GCTAACGATG	ACGCTGTACA	CAACATCACT	240
AATGATGACA	CCGTATAAGA	CATCGCTAAT	TATGACGCTG	TATACGACAT	CGCTAATGAC	300
ACCGTACGAG	GCACGCTAAC	AAGGATGCTG	TACACAACAT	CGCTAATGAG	GACAGTGTAC	360
AAGCCATCGC	TAATGAGGAC	ACTGTATATG	ACATTGCTAA	CGAGGACACT	GTACAAGGCA	420
TTGCTAACGA	GGACGCTGTA	CACAACATCG	CTAATGACAC	CATATAAGAC	ATCACCAATG	480
AGGATGCTGT	ATATGACATC	GCTAATAACA	CCGCTCGAG			519

## (2) INFORMATION FOR SEQ ID NO:19:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCAGCTCTCA	TCCTCGTCTC	CCCAACACCA	TAACGTCTCT	ATCCCGCCTC	CAACCCACAC	60
CAGGCCGAAG	CCCTCAGAGA	GTGTTTTCAT	CAGGAACCAC	TCTCGAACCT	GAAGGTTGAC	120
TTTAGCGTTT	AGCAACCCAG	GGCGGTGTGT	GTGTTTCCCG	TTTGTTTTTC	TGAGTGGTAG	180
CAGTGATCAC	CGTAATTCCA	TGTAGCCATG	TGCTAGCAGA	ACCCCTGTGT	CCTCACCGTG	240
GCCCGTGTGA	CCCCAGCCGA	CGAGTGCCCG	GCGGAGTCCC	CGCTGCCTTC	CCATGGTCCA	300
GTGAGCTGCC	AGGGCATCAC	ATGACTCTCA	GCTGGGCTCG	AG		342

## (2) INFORMATION FOR SEQ ID NO:20:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAATTCGGCC	TTCATGGCCT	AGAGCAGCTC	TGAGGTAGAA	ATTACAACGA	TGAAAAGAGC	60
ACAACGTACA	AAACCAAGAA	AGAGTCTGTT	GTGTGAAGGG	TCATTTCGATG	AAGAAGCTTC	120
TGCACAGTCC	TTTCAGGAAG	TGTTAAGTCA	ATGGAGAACC	GGAAATCATG	ATGACAACAA	180
GAAACAGAAT	TTACATGCAG	CAGTAAAAGA	CTCATTGGAA	GAATGCGAAG	TACAGACTAA	240
TCTGAAAATT	TGGAGAGAAC	CACTTAATAT	TGAACTTAAA	GAAGACATTC	TATCCTATAT	300
GGAAAAATTA	TGGCTTAAAA	AACACAGGAG	AACTCCACAA	GAGCAACTTT	TTAAAATGCT	360
ACCAGATACG	TTCCACATC	CACATGAAAC	CACTGGTGAT	GCACAGTGTT	CTCAAAATGA	420
AAACGATGAA	GATAGTGATG	GTGAGGAGAC	CAAAGTACAA	CACACAGCTC	TTTTATTGCC	480
AGTAGAAACA	TTAAACATAG	AGAGACCTGA	ACCATCTCTA	AAGATAGTCG	AACTGGATGA	540
TACTTATGAA	GAGGAATTG	AAGAAGCAGA	ACATCTCGAG			580

## (2) INFORMATION FOR SEQ ID NO:21:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GAATTCGGCC	TTCATGGCCT	AGAAAGATCT	AATTATCATG	GACCTGCGAC	AGTTTCTTAT	60
GTGCCTGTCC	CTGTGCACAG	CCTTTGCCTT	GAGCAAACCC	ACAGAAAAGA	AGGACCGTGT	120
ACATCATGAG	CCTCAGCTCA	GTGACAAGGT	TCACAATGAT	GCTCAGAGTT	TTGATTATGA	180
CCATGATGCC	TTCTTGGGTG	CTGAAGAAGC	AAAGACCTTT	GATCAGTTGA	CACCAGAAGA	240
GAGCAAGGAA	AGGTTTGGAA	AGATTGTAAG	TAAAATAGAT	GGCGACAAGG	ATCGGCTCGA	300
G						301

## (2) INFORMATION FOR SEQ ID NO:22:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```
GAATTCGGCC TTCATGGCCT AAAAAAAGGA TGGTGTGTG AGACCAGAAG CAGCAGCAGT    60
CCTCGACATC AACTACAAC TCCCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA    120
ACGCCATATC TCCAGCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTTAAT    180
CCTTCAGAAA ATTCATTACT CTTCAAAGT GTCTGTGGT TTGTGACAAC GATATGACTA    240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAAA CATATACGTG    300
CACAACTCTG GGATTAGGG ATGAAGCTCG AG                                332
```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```
GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA    60
AACAAAACAA AACAAAAGA GAAGGCTATT ATTAACATTC GAGATAATGT GCCAGACTGC    120
TTCCATGTAT TTTCATTATT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC    180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGGAGAA AGTTACCTCC TGCCTCGAG    239
```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```
GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTTATTTTT GTAAAGCATC TTTTCTTCAA    60
TTCTTGTTGG CATTCTGGGC CAAAATATTT CAGGTTGGT CGGTGTGGAG TTAAGAAAAG    120
CAGGCGTTTT AGTGGAGAAA TGGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT    180
TTTTTTTTGG AGACAGAGTC TTGCCCTGTC ACCCAGGCTG GAGTGCAATG GTCTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```
GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG    60
```

ACTGAACAAA ATATTTTCAA AGACATTGTG CATTCTTAA AGCCAAGATT TTAAAGACTA	120
ATGTCCTTCC TGAGGGTTAC TTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG	180
TCTGATAAAT TTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G	231

## (2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTC	60
CAATTCTCTG TCATTTCTTC ATCTGCTTCT ACTGATTTT TCTGCTCTG TTACTCTTC	120
ATTTTGGACC TATTTCCCT TATTTGGTGC TTGCATACA ATTTGTTGGG ACTGGATCTT	180
TGCTAGTCTT TAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC	240
AATCAGAAAC AATTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC	300
TCTCGAG	307

## (2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC	60
TTCAGTCTTT CCCAAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC	120
AGGCTGCAGC CAATCTTCAA GTGGCATACA GGCCAAACAT CCATTTATAA TATGGTTGGA	180
ATTCCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA	240
CGCAACTCTC GAG	253

## (2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT	60
TCTCCTCGCT CCATTCTGTC CACATTTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC	120
TGACTCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA	180
CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAATATAT	240
GATGCCAGCT CGAG	254

## (2) INFORMATION FOR SEQ ID NO:29:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGAAGAGT AAGCAGACTA GGAAAATACA      60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT      120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAAA CCCCAGAGTT      180
TGTTTAACT AGAGCTCTGG TTTTGCCAAA C                                     211

```

## (2) INFORMATION FOR SEQ ID NO:30:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT      60
TTGTTTGTAG GTTAGTTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGTTGATGAG      120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG      180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATT TCGTTCATTT TGGTTCTCAG      240
GGTTTGTAT AATTTTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA      300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA      360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC      420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCACTGGA GGTGGGGCAC      480
AGAGACTACA GGTCACTGGA GGTGGAGCAC AGAGACCACA G                                     521

```

## (2) INFORMATION FOR SEQ ID NO:31:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC TTCATGGCCT AAAATTTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG      60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTTCTAA TTTCTTTGC AATTTTTTTT      120
TCAGGAATTC GGGCCTTGCT GTGTTGCCCA GGCTGGAGAG CAGTGCCACT ATCAGAGCTC      180
ACTATAAAT CAAACTCCTG GGCTCAAGCA ACCCTCCCAC CTCCCAACTC CCCTCGAC       238

```

## (2) INFORMATION FOR SEQ ID NO:32:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
GGTTTCTTAA AAAAAAAAAA AAAAGGAATT TGATCCAGAG CAATTTTCT CAATTAATAAT    60
TTGTGATTAC ATTTCTGAGT TTCCATGGCA GAGTTGTGAG TGGGGCTGTG ATATAATTTA    120
ACTTCTCCTA AATTGCTGAC ACCGATAACC CTATAAATTA ACAGATGGCG GAGGGAAATC    180
TCCTGGCTTC TTCTGGCTA GTTTTTTTTA ATGGTCTGAT TTTTGAATA GGGGTTTGA    240
GTCCCAGCCG ACTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GAATTCGGCC TTCATGGCCT AAAGACTTAC GTTATATTTT CATATACTCC TCCCACTCT    60
TAGTGTGTTG TCAATATACA TTTGTTTTTA CATGTAAAAA CACCACAGTA TATTGTCTT    120
AATTTTGCTT TTAATAGTAA ACTGTCTTAT AACAAATTAT GAAAATGGAA AAAACATGT    180
CTTTCTTATT TGCCCTCATA TTTATCCATT TAGGCACTCT TCCTTTTCC CTTCATTCC    240
AGGTTCTCGA G                                         251
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GAATTCGGCC TTCATGGCCT ACTAACATTT ATGAAAATTA TTTGTAAATA AAATAAGAGG    60
CATTGAGATT AAAATTGGAG ATAAAGTTGC TGATGTGTTG TTTTCCTGAA GTATTTTTTT    120
TCTTAATTCT GATCTTTGTT TCCCAATACA ATCACACTCA CACCCTTGCA GTTCAGTTTC    180
CTGACGACTC TCTAGTGTGC CAGATCTGTG TTTCTATGTC AGTGATCTGT TCCCATCTC    240
TCGAG                                         245
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTGG      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTC GTATGTTCTT CCACTTCAGT GAAATTCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCACG GTTTCATTTT      240
ATTCCCATTC AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC      300
CTAAAACCAC TAGCCCAAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGGTCTC GAG                                             383
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTTGGTGCG      60
GACCTGGTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                                         133
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCA AATAGGTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC      120
TAGACTGTAA GTCTTGTGAT TGTCACTTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCCTC CATCCCCAAT AATTCAAGCT GCATTCAGA      240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG                               276
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```

GAATTTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC      60
TTATCAAGGA TCTACTCACT CAGTTTCCCT AAAGCTCTCT CTCCAGATCG GATTCAACCG      120
CACATCATGA CAGATGTTCC GGCTACATTT ACCCAGGCTG AGTGTAATGG GGATAAACCA      180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATGACTGA TGTGGACAGC      240
CCCCTGCCAC ACTACAGGGT AGAACCCAGT CTGGAAGGTG CACTCACCAA AGGAAGTCAG      300
GAGGAAAGAA GAAAATTACA AGGGAACAGA CTCGAG                                336

```

## (2) INFORMATION FOR SEQ ID NO:39:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCTGA      60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT      120
TAGGAAGGTC CTGGGAGAGA AGGGAAGAA CATCAAGATT ATCAGCAAAA TCGAGAATCA      180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG      240
TGGTGATCTA GGCATTGAGA TTCCTGCAGA GAAGGTCTTC CTTGCTCAGA AGATGATGAT      300
TGGACGGTGC AACCGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT      360
GATCAAGAAG CCCCGCCCCA CTCGA                                385

```

## (2) INFORMATION FOR SEQ ID NO:40:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCACCTTT      60
GGTTTCTTA TCTATAAATA CTGATTAAAA AAAAAAGTAC ACTGTCTGCC TTATAAGCTA      120
AAATGAGTGA ATACAGGCAA AATGCCTTAC ATTTTACTTT ACATTTACTA AGCACCCAGA      180
AAATGTTAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTTCA AGGAGGGCGC      240
TCGAG                                245

```

## (2) INFORMATION FOR SEQ ID NO:41:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AAATAAAGAT GATTTTGTG CTTAGCAGTT TAAGGTATAT      60
GGCTGCATAT GCAAAACTCT TTCCAATTC AGTCGCTACT TTTACTTCTG CCCTTTCTAT      120

```

CCATCGTCTT CATTGTGTGT GTACAGTGT GTGTGTAAGC TTATCAGTGT GTTTTTTAT	180
TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA	240
TCTCGAG	247

## (2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA	60
TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG	106

## (2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 237 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTCC AAGTGTATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT	60
TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAA GCAACTGAT CCTGTAAGTT	120
TTGGCATCTT AAGTGGAAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAA	180
TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG	237

## (2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 476 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG	60
TGTGTCTGTG CATTATTTG GATCATGGAA GGTTGTAGAT GTGTATTCT AACTGTAGAT	120
AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG	180
TGGTATTTCT CTATGTTTGT GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC	240
TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT	300
GTTATGTGTC CTCCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA	360
TGGATGAAGC GGCCTCATT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC	420
ATGGCATTTC TGATCACATT TCATTGCCA TAACAAGTCA TGTGGCCATA CTCGAG	476

## (2) INFORMATION FOR SEQ ID NO:45:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```
GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG    60
CTCTGTTTGT GGGGCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC    120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCTT CTACCCTCAG GAGGTCTGCT    180
ACCAAATGCA CTGCCCAGT CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGGGTTT    240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACTTAT    300
TTTAACTACT CTGCAGCAGC AGCAACAGCA GCTCTCCAG TTTACACCAC AACTCGAG    358
```

(2) INFORMATION FOR SEQ ID NO:46:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```
GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAGTGGCCT    60
CCAGGGATAA AGCAACTGCT TGGTTGCAG GGCCTCCTCT GCGCTGCTGA GCCATCAGCC    120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCTCCTA CATAGGGTTC    180
TGTCATCACT GAGTCTCACC ATTTCCCTCT CCCAGTGTG TTTATTATGT GACACACACA    240
CACGGCACTA TGTTTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTTG TGTGTTTCATT    300
CTGTGTTTTG TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG    353
```

(2) INFORMATION FOR SEQ ID NO:47:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 456 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```
GAATTCGGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT    60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA    120
GCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACACACTTA CCTCTCATAG CTGTGGACAT    180
GGAGGTGAAA GTGCCGATA CACTGTAAAG TGTTATATAC GTGTAAGAGA AAAAATCGGG    240
CCAGAGGCTG GGCTTGTGTT AATTGATTCA GGAAATTAC CAGAGGCCCC CTAGATGCAA    300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC    360
CCGTCAACCG TCAGTGACAG AGTGGGCTGG GTGCTTGCCT CCCACAGTGA GGAAGGCAGA    420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG    456
```

(2) INFORMATION FOR SEQ ID NO:48:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 509 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```
GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTTGAAG CACACACAGG CTTCCCGCCA CTTCTTTTAA ACCGCCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCCTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTATTAT TAACATGATT TTCTATATC      360
GTTACTGTCG AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTGTATTTA      420
TGTTCCTTTT TGGTGGATTG TTAATGACCC TTTTGGTCT GTTTGTGAGC TTAGTTTTCT      480
TGGGCCAGGC CTTTACAATA ATGCTCGAG      509
```

(2) INFORMATION FOR SEQ ID NO:49:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 467 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```
GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TTCGCCTCTT      120
GGGCTCAAGT GATTCCCCCA TCCCCACCC CCCTTCTCAC CCCAGATTG GACTATAGGC      180
GTGTACCACC ACGCCTGGCA GAGACCGGT TTTGCCGTTG CCCAAGCTGA TCTCGAACTC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTTT AAGTTTCTAT      300
GCTGTTTAAT TTTTTTTAAC TGATTAAATT ATTTGCATTG TGTGGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTTGGTGA GTCTTTCTTT GTAACCTAGT TAAACCATTC      420
CATATCTTTT TAAAAGGATG TATATTCCTT ATCTGTTAGG GCTCGAG      467
```

(2) INFORMATION FOR SEQ ID NO:50:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```
GAATTCGGCC TTCATGGCAG AGTGAAGGG GTTGTAATAA TTAGGAGAGA GATAATTCTT      60
AGTGCATTTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG      168
```

(2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 228 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

```
GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT    60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTAAAGTT AATCAAATGT    120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC    180
TTTCAAAAAT GTTATTCTTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG                228
```

(2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 247 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

```
GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG    60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAAGC    120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC    180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCTCCC TACTACCATT CCTGTCCCGG    240
TCTCGAG                                247
```

(2) INFORMATION FOR SEQ ID NO:53:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

```
GGCCAAACA AAGCTTATAA AGGTTCTGTC TCCCAACGTA ATTACCTCCA ATCGGCATTT    60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTTGCCCAAG GATGGACTCG    120
AAATGAATA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC    180
CATCACCGGA GCTTTTGTA TTGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG        235
```

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT	60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT	120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCTA CATTGTACTC	180
AAGTCTATGA TCTTTTACC ATTCTTGTA CAAAGGATT TCACTGGCTG G	231

## (2) INFORMATION FOR SEQ ID NO:55:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GTACTGAATT TCAGGAAATG	60
GGATAGAGCT TCTAACCAGT GTATTCGCTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC	120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTTCT GTTTTTCAAA ATTGATGCTT	180
AATTGTAGCT GTTATTCTAA TTTGTGACAT GGAACCTAAT CATGCTTCAA TCCTTGATAG	240
AGCAAACTC AGAACAGGT ATGTAAAAAT ATAGTCTGGC TTTAGAATTT GTTAATTCAC	300
CTGCTTTGCC ACAGAAATG GAGACTCGAG	330

## (2) INFORMATION FOR SEQ ID NO:56:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GAATTCTAGA CCTGCCTCGA GATCTGAACT ATAATCTTTT CCATTCTATC TAGCTCCCAT	60
CCTAAGTCCT CTCCTCCTAA CGTGGAATC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC	120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTAC AGTCCCAGAC CACGGAACAT	180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCCTCGAG	230

## (2) INFORMATION FOR SEQ ID NO:57:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCAN AACTAGCCA	60
CATGCAATCA TGGGAGAACA GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA	120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG	180

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC	240
TCTTAAAAAT GTCATGTTAC TTAAAGAATA AGCCATACTG CTGGCACCTA GAATATTTTT	300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTTT AAATGGCCCC CAGGCTAAGA GGCAGCTGCT	360
CACATCCCTG CAACAAACAT GTTCTTTCCT TTCTGCATAG CCTTCCATT CTGAG	416

## (2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTTT CTAATGAATA AAAATCAAGT	60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCAC CACGCACTCA	120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAAA ACTAATCCAC CACTTATCCA	180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAACT	240
AACTGAACT GTTGTGACTG AATATCTAAA TAGTGGAAAG TCACTCGAG	289

## (2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

GAATTCGGCC TTCATGGCCT AATTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG	60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCAGG GAAAAGACAT AGGACCTCTG	120
ACTCTAAGTG AGGTTCTGGA TTATTATGAG AGATTTTCAG AAATGGTCTA ATGGTGTGG	180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCGATGAGA TTCCCCCATA	240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGGCTC CAAAGACCAA GAGTTGGTTT	300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAATGG CTTTGTATGG	360
TAAGAAAGCT TTAATCCTCG AG	382

## (2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 196 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

AAAAAAAAC CAAACCCTAT TATTCATTG ACAGATTGTC TTAGAGTTGA TAGCATTTAA	60
TAATTGAGTA AGTACAGTCC TTCCTTGTTT CCAACGTGCC CTATTTTTC TTTCTTCTCT	120
ACTTTTGCA ATGCATTTT CCTCTTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTC	180
TCAAAATCAC CTCGAG	196



## (2) INFORMATION FOR SEQ ID NO:61:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```
GAATTCGGCC TTCATGGCCT AACCACATTT TTCTAATTAG TGTTC TAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TGCCTAACTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTTCAG TAACAAGTTT ATGCAGAACC TTCCATATCT      240
CTCATAAAAC CAGAGCATTC ATAGAACCAG AAACCTCTCGA G                          281
```

## (2) INFORMATION FOR SEQ ID NO:62:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```
GAATTCGGCC TTCATGGCCT AAAAGATTG AGCATTTCAG AATTTTAAAC ATAAAAGCAT      60
AAACGTAGAT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTTAA TCATTAAGTT AGAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCTGTAAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAAGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCAG CCTGGGTGAC      300
AGAACAAGAC TCCATNTCAA GGAAAAAATA AAAGAAAAAT ATATATATGA ACTTCAGAAT      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCTCTCGAG                          400
```

## (2) INFORMATION FOR SEQ ID NO:63:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```
GAAACCATAG TGGCAGATTT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTGGGTTTTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACTCAGTA      120
TTTCCTTTGA AAATGAACT TTTCTCTATA TTTTCTTTC CCCCATGCAA ACTTTTGTAT      180
TGTTTTTCTG AAATCATAAT TCATTTGACT TACCAGTTAA TATTGATACA GGTCTTGCAT      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297
```

## (2) INFORMATION FOR SEQ ID NO:64:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```

GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA      60
AAAGAAAGAA TTAAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA      120
ATCCAAAGAC AAAAGTCAGA TGGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA      180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT      240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG      300
TTCCTCTCA TTCTGTTCGG AAAGTTGCCA TGAGGATCCC TCTGTTTCCC CCAAAGCTCGA      360
G                                                                                   361

```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```

GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTTCAAGAC      60
TTTAAAAATA TTTTGTGGTT GTATTGCACT AGGAAATCTC TCCACCTCT CCCTTTTCTC      120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG      180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAACAA AAAGTGTGCA GCTGCCTCTT      240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT      300
TGTCAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA      360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG                                                                                   393

```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GAATTCGGCC TTCATGGCCT AATTGTGTAT TGCTAGAAAA TACACAGTTT TGAGATTTT      60
GGGCATAATT GGCCTTAGTG TGTCATTCT GCATTAAAA ATAGGTTAAT AATCAGATGA      120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGTGAA AGTTTGTGTA ATGTTTTTAA      180
TTGTATTTT TCTGCTTATA AATTGTCTCT TAAATCACTC CCTCCTTCC CGCCCCCCCG      240
ACTCCTTCTC CCTCCTTCCC GCCCCCCCAA CTCCTTCTCC CTCCTTCCCG CCCCCGCGAG      300
TCCTTCTCCC TCCTTCCCGC CCCCCGATCC TCGAG                                                                                   335

```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT    60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT    120
TGGGTTTTTT TTTTCCCTTT TTTTTTTAA GAGTATAAGG TTTACACAAT CATTCTCATA    180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG        235
```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT    60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC    120
TGTCCTTGA GTCAGTCAAG AAATCCACC CCAGAAGTGT AAAAACC AAT CAATAATATA    180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGGTT GAGTCTCCTG CCAACTTTAT    240
GTTTCCCAAT CGGCTCG                                257
```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC    60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC    120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAAATGGG ATTCATGGGG GGCAGAGGTC    180
AAAGGTGAAG CAGAAGTCAG GGGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA    240
GAGTCAGAAG GGGTGCTCGA G                                261
```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC TTCATGGCCT AGATTGAATT TTTAACACAG TCCTCTCAGA AACTGACTAA	60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTAGA	120
TAAGTAGGGA TTAAATTCA ACAAAAATAA ACACATTTTA AACTCCTATA ATACATTTAT	180
TTAAAATAAA TATATTTTGG CCAAAAGAAG TGTAAGTTCA AAGAGTTAAC ATACAGATTA	240
TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG	279

## (2) INFORMATION FOR SEQ ID NO:71:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AAACATATACA	60
ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGAAAA AATACACCAT GTTCTAAAAT	120
AAATTCTAG TGATTATTG TGACTTTTCAT GCATTTGGAT GATTTTAAAG ATTTTATATA	180
AAAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAGAA AACTTGTAT AGTCTTGGGA	240
GGGGGGATTG TCGAG	255

## (2) INFORMATION FOR SEQ ID NO:72:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA	60
CTTCTTTCCT TTGACACAT CATCTCATTG TATGCACTCT TGGGCTGTAA CTGTCATTTC	120
TTTCCTGTG CACTCGAG	138

## (2) INFORMATION FOR SEQ ID NO:73:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC TTCATGGCCT ATCATTGTC ATTAAATCTG TAGATTACAT TGAGCATTAT	60
GGACATCTTC AAAATATTTC AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTGTTTAA	120
TTTCTATGTA TTTGTACATT TTTTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG	180
GGAGACCCTA ACCCAACGGC AGCTCGAG	208

## (2) INFORMATION FOR SEQ ID NO:74:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

GAATTCGGCC TTCATGGCCT ACATGAACT GTTAGTCACT TCATTTCTGT TTCTTCCCTG	60
TTGCAACAGC CCATCTTCGT GGGAAGAACC AAGCTTTAGG CTTGGCTCTG AACAGCCACA	120
AAGTGACTTG GCTGAGGTCC TGCCATTTCC CTCATGCTCA GCAGGGGGCA GCAGACCAGG	180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCCC ACTCCACCTG TGGATTTACC	240
CTGGATTGGG CAAGCCCCAT TACTCGAG	268

## (2) INFORMATION FOR SEQ ID NO:75:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCCTCCCA AACCTTCAGG TAGTCAACCA	60
CCAGCAAGGC CCCACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG	120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT	180
ACACAAGCAT TTTGACATCA ATGAGCATTT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT	240
GGTGCTTGTG GTGATTGTGG TGTGCAGTAT CCGGGAAAAG CTCGAG	286

## (2) INFORMATION FOR SEQ ID NO:76:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

GAATTCTAGA CCTGCCTCGA AAATACACTG TTACTATCTT AATCTCAAGA GTGTCATTAC	60
AGTGAGAATC TCATTTAAAA GCATACCACT GAAATTAATA GCAGTGCTTA TCAAAGAACA	120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTAGTTT CAAGTTCCAG	180
GTAGGCCATG AAGTTCGAG	199

## (2) INFORMATION FOR SEQ ID NO:77:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG	60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCCG TTCTGTTTGA	120
TGGTGAAGAA GGGCTACCGG GATCCCCCCT ACCACAAC TGATGCACGCC TTTTCTGTCT	180
CCCACTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA	60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTACTCTCCC AGTGACCCAT	120
ACTTTCTCTT CCATCTCTGC TGGTTCTCTC TACTACCGAT TCTTTCTTGC TGTTCCTCTT	180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCTTCT	240
GTGTGTTTTG CATTGAGAAC TCCCCTCCG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA	60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC	120
AGGAATGCCT TTTAGTATAG TTATTTCACT TACTATTTTA TAGCATATTT TAATTGTATA	180
GTAAGCATTG TGTCTGTTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG	240
GTGGCTTATA CCTTGTAATC CCAAGCACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT      60
TTTTAGAAGA GGACAAATCC TTAAGAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG      120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAGTAA      180
TTAATGACCT CTTCAGTGAT GTCCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG      240
AGGAGATGGA TCAAGCATTG GCAGAAAGCA GCGAAGGGCT CGAG                        284

```

## (2) INFORMATION FOR SEQ ID NO:81:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GGGAAGTGGG GGAAGACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG      60
AGGGCCAGAG GGAAGCCAG AGAGTGGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA      120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG      180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG      240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG                        284

```

## (2) INFORMATION FOR SEQ ID NO:82:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTTGGTGGCT TGCTTGATAA GAAGGTTTGA      60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT      120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTGA      180
GCACATGATA TAGGTTATGG TTAATGTTCC TTTCATCTT CCTGGTTACT GATAATGTTT      240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTCTGT TTATTTCCCT      300
GGGACCTCGA G                                     311

```

## (2) INFORMATION FOR SEQ ID NO:83:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

```

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTTCA      60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTCTTTT TTTATCACAA CAGAAGTAAA      120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTACT CCCCCCATTT CTCACAGAGA      180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCAG ATTCATGTAA      240

```

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT ACACTCCATC 300  
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTAAAGTN CTTTAAACAT TTAGTTTGTG 60  
GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAACCT AAAATAATCT TTAATTCATT 120  
ATTTTTTCTA CTTCTAGGCC AGTTTGTAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180  
GATAGGATTA TTTTGCA GTT TTGAAACAAC ATACAAATTG TTATAGATT CAGAGTAGGG 240  
CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300  
ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 304 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGTTT AACTTAGAAA AACTAGCAAG GGATTGTTCA 60  
CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120  
TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180  
GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240  
CTTTTGGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300  
CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 291 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60  
GGTGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120  
ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGCTG 180  
GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAATCTCTCC TGATAGATTT TATTCTCACC 240  
TGTTGGGCAA TTTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291



## (2) INFORMATION FOR SEQ ID NO:87:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTCAGAG      300
TCAGTCATTG GTTATACATG TGTAATTCCA AAGCACATAA GCTAGAAGAA GAAATATTTT      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG                                         423

```

## (2) INFORMATION FOR SEQ ID NO:88:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTCAACA AGAGATTTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTTGCTGT CCTTTTGCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG              172

```

## (2) INFORMATION FOR SEQ ID NO:89:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTCTTTA CTAAAAAACA CCAAAAAACA AATCTGTTTT      180
ATAATCACAG ATTTTTAGAC AAATTTCTG TATCAGGAAG AAATACAAAT TTTGTCATGT      240
TTCTCAAGCA GTGTCTCGAG                    260

```

## (2) INFORMATION FOR SEQ ID NO:90:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC	TTCATGGCCT	AACTAAGAT	AAAAATAAAC	AGATAGGAGA	GCTGAATTCC	60
ATTTCAAGTC	CTCATGTATA	TGCTTACAAA	GTTCCAAATT	AAGCTTGGGA	CTGGTTCTTA	120
CATGGCAGGT	AATCCAAACC	TTTTCTATT	ACTGAAGATT	TTCAGCTCTC	TTACAGAAAT	180
ACACAGGCTA	CCATTAAAAT	TGTAGGGATA	AATTTTAAAT	TGAATTTGAA	AATAAGAGCA	240
AGTACTCGAG						250

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 260 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTGAAAC	ACAGAGTTGT	TCTGCTGATA	GTTTTGGGGA	TACGTCCATC	TTTTTAAGGG	60
ATTGCTTTCA	TCTAATTCTG	GCAGGACCTC	ACCAAAGAT	CCAGCCTCAT	ACCTACATCA	120
GACAAAATAT	CGCCGTGTGT	CCTTCTGTAC	TAAAGTATTG	TGTTTGTCTT	TGGAAACACC	180
CACCTCACTT	GCAATAGCCG	TGCAAGATGA	ATGCAGATTA	CACTGATCTT	ATGTGTTACA	240
AAATTGGAGA	AAGTCTCCAG					260

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 354 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC	TTCATGGCCT	AATTTCACT	TTTTTTCCTG	GTGCTGCATA	AACATATATT	60
AAATGTTGTT	ACTGATCCCT	AGTACTGTTG	ATTTGTGACC	CTTCTCCTGA	GGGAGACTAA	120
AGCTGCTTGA	GCTAAAGGCT	TTTGAGACAT	CCCATACGGT	TCCCTGAACA	AAGTTTCTC	180
TCCTGACCTC	AGTTCTCTTG	ATGACCTTGG	CAAGTGGGCC	CGACTAGTTG	GACACTAATG	240
AGGCATCGTA	ACATGCCGGC	CCCATCCTGT	CCATTCTGTT	CTCTTTGCCA	TCTAGCATTG	300
AGTGTGTGT	CTTCTAGTG	GGCATGAAGA	CGGCTTTAAA	ACCATCCACT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 493 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```
GCTGAAAATG CAAAACATGA AGAAAGTGAT TGAGGCAATT CGAGTGGAGC TGGTTCAGTA      60
CTGGGACCAG TGCTTTTATA GCCAGGAGCA GAGACAAGCT TTTGCCCTT TCTGTGCTGA      120
GGACTACACA GAAAGTCTGC TCCAGCTCCA CGATGCTGAG ATTGTGCGGT TAAAAAATA      180
CTATGAAGTT CACAAGGAAC TCTTTGAAGG TGTCCAGAAG TGGGAAGAAA CCTGGAGGCT      240
TTTCTTAGAG TTTGAGAGAA AAGCTTCAGA TCCAAATCGA TTTACAAACC GAGGAGGAAA      300
TCTTCTAAAA GAAGAAAAAC AACGAGCCAA GCTCCAGAAA ATGTTGCCCA AGCTGGAAGA      360
AGAGTTGAAG GCACGAATTG AATTGTGGGA ACAGGAACAT TCAAAGGCAT TTATGGTGAA      420
TGGGCAGAAA TTCATGGAGT ATGTGGCAGA ACAATGGGAG ATGCATCGAT TGGAGAAAGA      480
GAGACTCCTC GAG                                         493
```

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```
GAATTCGGCC TTCATGGCCT ACACACGGCC AAATTTGAGG GCATTCTCAC ATGTGTTCTT      60
CTCTCAAAAC CACTGGGGTT GACAGATCCA GGAGGCTAAA AAAAAGTGAC CTCTATAATT      120
CTTTAAAGGT GCTATTTTGA GAANATTGTA TAATTTATTC ACAGTATATC TAAACAGAA      180
TTAAGGACAA TTAATATATC TTATGTGACA GCCTTTATGT CTAGTCACAT TTGATGAAAT      240
AAAAAATTC TGAATCTGAA TAGAAGTTCT ACTGTNTCAG GATTGAACTC GAG          293
```

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```
GAATTCGGCC TTCATGGCCT AAAAAGACAG GAAAATAAGT CTCTTTGTAT CCTTATTAAT      60
CATTTGAAAT TATGCTATAA TATTTTTTAA AACTCACCTG TTTGGTCTG GGTGAAGCAG      120
TTCCTGAAGG AGTGTTTTGT CAGAATATAT TGTTAGGTGA ATAGAGGGTT CTGTGGCCAA      180
GTAAGTTTGG GAAATAGTGG GTTAGACAAA GTTGAGTTAC TGTTGGCCTT TCAGACCTTT      240
GATACGCTAA TGTGCATTTT AAATCTCCAA GAAGCTCGAG                                         280
```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC	120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAAACTT AATCTGCCT ATAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTTCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

## (2) INFORMATION FOR SEQ ID NO:97:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTCAAGG AGCCTCTTTA CAGTAACTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCCTCA TCTATAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT	240
TTGCAGGCC TCAATGACAA AGACATGAAC GACTGGTGT ATGCCTTCAA CCCACTTCTA	300
GCTCGAG	307

## (2) INFORMATION FOR SEQ ID NO:98:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATTGGGGGAA ACAGATCACT GCGGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAGAAGTC CCGCTTGCCG CCTTTGCTA AAAGTCCGC ACGCCTGCTC GCGGTGGGCG	180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCCA AATTACTTTG TTGGTGCTCG AG	292

## (2) INFORMATION FOR SEQ ID NO:99:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT	60
---	----

```

GCCTCTCTGT TCTGGTTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTATAAG      120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT      180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC      240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG      300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT      360
TGCGCACCAT AAACCTTAGC AGCTGGAAAT CCTCGAG      397

```

## (2) INFORMATION FOR SEQ ID NO:100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTAA TAAAGCCATA TCATACCTCT CTTTAACATT      60
GTTAAAAGGA AACTGTGTGT GTGTATTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGTC      120
TTGGGGGGCT GTTTATTGTA GGATGGTCGG GGGGCGGGTG GGTGAGACCC ATCCATCCCC      180
CATGGAAGAC CAGACCCATC CATCCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC      240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG      300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTAATCCTGG AAAAAGGACA      360
TCTTCTCGAG      370

```

## (2) INFORMATION FOR SEQ ID NO:101:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA      60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG      120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTTA CTATTATAGC TCAGGTGTTT      180
GAATTCTCTC TACCCACCT ATCACCCTA TCCCTAACA AAGAGTCTGG CTTTCATAAAT      240
ACTGTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA      300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG      340

```

## (2) INFORMATION FOR SEQ ID NO:102:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG      60

```

```

AGTGTCTCTGG AAATAGCTGG GAGGCCTGTG TGTTTAGGAG CGCCTTAAAC AGTAGGATAT 120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTTGGC TGTTATTCTA GTAAGACTGA 180
AAATTTTCAGG TGGGATTGTA ACAGAGATGT GTGGTGATCT GACTTGGTTC ATTCTGCTGT 240
GGTGAAGAGA CTGGAGGTGC GGGGCAAGTA TGGAAAGCATG GAGACCATTA ATTTATGGGG 300
GCAATGGTAG AGGGAAGAGA AACAAATGCTA TTAAGTGGAG TAGGAGCACA CAGAGAACAA 360
GCCACTCGAG 370

```

## (2) INFORMATION FOR SEQ ID NO:103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCCTCT 60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC 120
TCAGAGCCTG GCATCTGCCG CTTTACCGCC TCACCACCCA AGCCCCAGGA TGCGGACCGG 180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC 240
CTCCCAGGCA GTGCCCCCCC GACTCTCGAG 270

```

## (2) INFORMATION FOR SEQ ID NO:104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA 60
GTTTACCTCA ATGAAAAGAT AATGTGCGG TACAACTACG ATCTGAATGG AAACCTCCAT 120
TTACTGAACC CAAGTAACAG TGCGCGTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA 180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTTCCT ACGTCAAAGG 240
GGCAGGAAA TCTTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG 286

```

## (2) INFORMATION FOR SEQ ID NO:105:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTTTA 60
AAAAACAGGG AAATAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC 120
TGACAGTCCA GTGGATACCG AGGAGTTCCT TTAGATACCC TGGTGAGGTA AGGACACAGG 180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA 240

```

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 339 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	AGAAATGGTT	CTGAAAGCGA	CAGTAGAGAG	ATGCAGTTGT	60
GATGATTTC	ACAACCTGGA	TGTTTTCTTT	CTCCTCTTTG	CTTCCATTCA	TCTCTGTTGG	120
CTGCTGTTGA	TGGAGTCAGA	CAGTAAACAC	GTGGCTTGGA	TAACACCCAT	CATCCTATGA	180
AGAATATAGG	GAGTACTTGT	TCTCTGTTGA	TTCAACTTTT	ATGTCTCCAG	TAACATTGCG	240
CTTATGAAGG	TACCTGTATT	TGTATGGACT	CTGAATAAAG	AAGAATTCAT	TTGTTTAGCA	300
AGTATTAGTT	CAGCAACCAC	TGAGAAACAA	GCACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:107:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 439 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATCATGTC	AAAGAGTACT	ACATACAGTT	TGGAATCTCC	60
TAAAGACCCG	GTAATACCAG	CTCGTTTCTT	CACTCAACCT	GACAAGAATT	TCAGTAACAC	120
CAAAAATTAT	CTGCCTCCTG	AAATGAAATC	ATTTTTCACT	CCTGGAAAAC	CTAAAACAAC	180
CAATGTTCTA	GGAGCTGTTA	ACAAGCCACT	TTCAATCAGCA	GGCAAGCAAT	CTCAGACCAA	240
ATCATCACGA	ATGGAACTG	TAAGCAATGC	AAGCAGCAGC	TCAAATCCAA	GCTCTCCTGG	300
AAGAATAAAG	GGGAGGCTTG	ATAGTTCTGA	AATGGATCAC	AGTGAAAATG	AAGATTACAC	360
AATGTCTTCA	CCTTTGCCGG	GGAAAAAAG	TGACAAGAGA	GACGACTCTG	ATCTTGTAAG	420
GTCTGAATCG	GAGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:108:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGAGGCA	GGTCTAGAAT	60
TCCAAATGTA	AAATTTACTA	AGGCTTTTCA	TGTGGAAGTA	GAATGCATAT	ATCTTTCTTG	120
ATATAACAAA	TGAATTTGGT	TGTAGCTAAC	GTGTTGTACT	AGTAAAGGTC	CACCTGCTAA	180
ACTTTTCTT	TTTTGTTGAG	GTATAGACAG	TAGAGTGATA	CCGATACATG	AGGAAAATGA	240
GAAGTGAAT	GCAGGCCAAA	AGCTGGTCCT	TTCCAGATGA	ATGTAACCAA	GACTCGAG	298

## (2) INFORMATION FOR SEQ ID NO:109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT AACTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAACT TCTCTCCAA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGTACCGCT TTACCCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCAG CACCCCCGAA TGAAGCTTAC ACCAACAACC AAGCAGACAT      240
CGCCACCCAG GGCTGGTTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTTCATCA AGAGGAGTCG CGCGGCAAG TACCCAATAC TCGAG          355

```

## (2) INFORMATION FOR SEQ ID NO:110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAAAAAACTG GGTCAAAGAA TTACGGAAAA TGTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAACTCTT TCTTGACCTT TGTAAGGGA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCCAGACC AGTGGTGGAG GGTGCTGTTT TTCTGGATAA CTGTTACGCG      360
CTAAGAAATT AAAAGACAGA AAAAACTGT GGATCATTGC CCTCGAG          407

```

## (2) INFORMATION FOR SEQ ID NO:111:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACTTGCATC TCAAACAAT      60
ACATTTCTCT GGTGAAGTT TTAGTGAAAA TCGATTATT CCTCCTCTGA GTTTACCCA      120
ATGGGTAAAG TTGTCTAAAT ATGGGATTCC TTAGAATCCA TCCTCCTTCC CAAGCATTTT      180
CCCATGTTTC CTCCACCCC CAAATTCTTA CCCCATTTCA GGCAGAGCTG AGCAAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AAACAGTGA GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAAT GTCAAAGTA TTGGCCAGC TCGAG          395

```



## (2) INFORMATION FOR SEQ ID NO:112:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGAAGAAGT AAGAGTGTTC ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G                                                                                   301

```

## (2) INFORMATION FOR SEQ ID NO:113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTTCAT GTGTTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAAATCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                                                                   268

```

## (2) INFORMATION FOR SEQ ID NO:114:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATTT CCTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCACTTCCA      120
CTACATACCT TACGATCTCT TTTGCTTTCG TTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCGC AAATTTGCA CTACTGGCAT CGATGGAGCC ATGACAATT      240
GGGATTTCAA GACCCTCGAG                                                                                   260

```

## (2) INFORMATION FOR SEQ ID NO:115:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC TTCATGGCCT AAACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT	60
GTTTCTAGGA GGGAAATAAA TAATTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA	120
TAACAAAGTG ACAATGTTC CCATCTCTC ATTTCCATTC CCAATTTTAC TTCTCGTCCC	180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC	240
AGACCCAGTC ACCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 238 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

GAATTCGGCC TTCATGGCCT AATTACATTT ATGCAACCAA GCTATCAAAA GGACTGGCTG	60
TCCTTGGGAA TGAAACGTAA CAAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTTTC	120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT	180
TATAAATAAA TGTC AATTGT AGGAAATGG AAAAAATAAT GAAAAAGAAA AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTCTTCTGT TCTCTACTCT TGAAATGCTA	60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA	120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTTCCAC	180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT	240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA	279

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 656 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

GAATTCGGCC	AAAGAGGCCT	AGTTATAATG	ATGGAAGAAG	TGGAAAAACT	TTGTGATCGG	60
CTTGAACTGG	CAAGCTTACA	GTGCTTGAAT	GAAACACTCA	CATCATGCAC	AAAAGAATAG	120
GAAAGGCTGC	TTTGGAAAAA	CAGATAGAAG	AAATAAATGA	GCAAATCAGA	AAAGAGAAAAG	180
AGGAAGCTGA	GGCTCGTATG	CGACAAGCAT	CTAAGAACAC	AGAGAAATCA	ACTGGTGGAG	240
GTGGAAATGG	AAGTAAAAAT	TGGTCAGAAG	ATGATCTACA	ATTACTAATT	AAAGCTGTGA	300
ATCTGTTCCC	TGCTGGAACA	AATTCAAGAT	GGGAAGTTAT	TGCTAATTAC	ATGAACATAC	360
ATTCTTCCTC	TGGAGTCAAA	AGAACTGCCA	AAGATGTTNT	TGGCAAAGCA	AAGAGTCTCC	420
AAAAACTTGA	CCCTCATCAA	ANAGATGACA	TAAATATAAA	GGCATTGTGAT	AAGTTCAANA	480
AAGAATATGG	AGTGGTACCT	CAAGCAGACA	ACGCAACGCC	TTCAGAACGA	TTTGAAGGTC	540
CATATACAGA	CTTCACCCCT	TGGACAACAG	AAGAACAGAA	GCTTTTGGAA	CAAGNTTTGA	600
AAACATACCC	AGTAAATACA	CCTGAAAGNT	GGGAAAAANAT	AGCAGAAAAGT	CTCGAG	656

## (2) INFORMATION FOR SEQ ID NO:119:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

GAATTCGGCC	AAAGAGGCCT	AGAGACAAAT	AGGTGATACT	GAATTTTATA	CTGTTTTCTA	60
CTTTTCCATT	AAAACATTGG	CACCTCAATG	ATAAAGAAAT	TTAAGGTATA	AAATTAAATG	120
TAAAAATTAA	TTTCAGCTTC	ATTTCTGATT	TCGAANCAAT	CTANACTGTT	GTGATGAGTG	180
TATGTCTGAA	CCTGTAATTC	TTAAAANACT	TCCTAATCTT	CTAGAAGAAA	AATCTCCGAA	240
GAGCTCTCTC	TAGAAGTCCA	AAATGGCTAG	CCATTATGCT	TCTTTGAAAG	GACATGATAA	300
TGGGACCAGG	ATGGTTTTTT	GGAGTACCAA	GCAAGGGGAA	TGGAGCACTT	TAAGGGCGCC	360
TGTTAGTAAC	ATGAATTGGA	AATCTGTGTC	GAGTACCTCT	GATCTAAACG	GTAAAACAAG	420
CTGCCTGGAG	AGCAGCTGTA	CCTAACATAA	CTGTAATGTA	CATTAACATT	ACAGCCTCTC	480
AATTTCAGGC	AGGTGTAACA	GTTCTTTTCC	ACCAGATCTC	GAG		523

## (2) INFORMATION FOR SEQ ID NO:120:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC	AAAGAGGCCT	AATTTCTTCC	TGTGATATGA	GAATTTCTTT	TCTTTCAGCA	60
GCTTTACCTG	CATTTGGCTT	TGGCTTTTGC	AATCGGCCCC	TCATTCTCGA	G	111

## (2) INFORMATION FOR SEQ ID NO:121:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

```

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGA AAAAAAAG 60
TGAAAGAAAA NATCACAATA CAGGGAAAAG TGAGCTAAAA ATCCCGGCAT TAAAAAGCCC 120
TTGATGTGGT CCTGAATCGG CTATTTCTAT CTGTTCCCTG AGCCTAACCT CAGCGCTGGC 180
CTCTCTAAAC CTCTTTTCAG TCCTCTCATT TTGAAAACAG GGCCCATAC ACATTCTCTG 240
AAAGCTTGCT GAGTGATTTA ACCACATAGT CTAGGGGAGG CACTCATCAA ACATAAGGCC 300
TCTCTTTTGG ATTTTATCC TATAGTGGTA TCTATCTAGA GGCTGGTGAA GACAGTGTGG 360
TGGAGGAAA GTGGGAAGGA TAACTGAAA TAGGACATAG ACGTAGAGGG GAGTCGATGG 420
TCATCTGGCT TGATAGGGA AGTTAGAGAG CTCTCCTGAA CCACAGTTAC AGAGCTTGGG 480
ATTATAACAC ACACAGCCCC AGAGAAAACA CTTTGTTTAC CATATTTCCT CTTCTGCTGG 540
GGCTCTGGCA CCTAATTGG TCAAAAGGCA GCACTCGAG 579

```

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

```

GAATTCTAGG AATGGGTCGG GAAGTTGAGA ATCTTATATT AGAAAATACA CAACTGTTGG 60
AAACCAAAAA TGCTTTGAAC ATAGTGAAGA ATGATTTGAT AGCAAAAGTG GATGAACTGA 120
CCTGTGAGAA AGATGTGCTG CAAGGGGAAT TGGAGGCTGT GAAGCAAGCC AAAGTAAAC 180
TAGAGGAAAA GAACAGAGAA TTGGAGGAAG AGCTTAGGAA AGCTCGGGCA GAAGCTGAAG 240
ATGCAAGGCA ACTCGAG 257

```

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCCTGT AACTCGGAAA AGATATCAGA GGAATGTTCT TGGCATCAGA GAGAAAGATG 60
AGAGCTCACC AGGTGCTCAC CTTCCTCCTG CTCTTTCGTG ATCACCTCGG TGGCCTCTGA 120
AAACGCCAGC ACATCCCAGG GCTGTGGGCT GGACCTCCTC CCTCAGTACG TGTCCCTGTG 180
CGACCTGGAC GCCATCTGGG GCATTGTGGT GGAGGCGGTG GCCGGGGCGG GCGCCCTGAT 240
CACACTGCTC CTGATGCTCA TCCTCCTGGT GCGGCTGCCC TTCATCAAGG AGAAGGAGAA 300
GAAGAGCCCT GTGGGCCTCC ACTTTCTGTT CCTCTGGGG ACCCTGGGCC TCTTTGGGCT 360
GACGTTTGCC TTCATCATCC AGGAGGACGA GACCATCTGC TCTGTCCGCC GGTCACTCGA 420
G 421

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTTCTC AAAAACTTC TTCCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CCTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTCGCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT	60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCCAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT	180
GTAACCCCTCT TGCAAATAAT ATTCCTTAC TACAGATCTG TCCCACTGTT CTCAGAAAAT	240
AAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 508 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAACA ACTTAAATTT CAGAACAACT CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAATTTT	180
ATATCTGCAA AAGCAATTAG ACGCTACCAC TGATGAAAAG AAGGAAACAG TTAACAAT	240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTCAGGA	300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTTA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 713 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AGCGGCAGTC CAGATCACGG TTACTGTGAC CTGACTGGAG      60
AAAAATTATG TGTCTGCAAT GATAGTTGGC AAGGTCCTGA TTGTTCTTTG AATGTTCCCT      120
CTACTGAGTC TTAAGGATT CTGCGCAACG TTAAACCCCT CAGTCCTTCT GTAGGTCGGG      180
CTTCACATAA AGCAGTTTAA CACGGGAAAT TTATGTGGGT GATTGGTGGA TATACTTTTA      240
ACTACAGTTC TTTTCAAATG GTCCTAAATT ACAATTTAGA AAGCAGTATA TGGAAATGTAG      300
GAACTCCATC AAGGGGACCT CTCCAGAGAT ATGGACACTC TCTTGCTTTA TATCAGGAAA      360
ACATCTTTAT GTATGGAGGC GCCCAAGGC CCGACCCCTC CCCCAGGGG GCAGTCCCT      420
TCTTGACAGT CTCAGCTTGC GGGGTGGGGG GAGTCATGCC CAGGGGAGGA GACTTTTAT      480
CTGGAGGGGA GAGAAGGATT CTAGGGGTGT GGAGTTGGAG AAAGAGGCTT CCTTGAGCCA      540
CCCTTCCAC CCCAGCCCTT GNTGGTCCCT AGGCCAAGCC ACCAAGTGAA ACCTTCCAGG      600
ATACTAGCCC GCCAGCTGTG GGCCCCAGAA AGCCAGCTG CCTTTTAGCA CTGGATACA      660
CACAGACCCA CGGAGCTCTC TGTGTTGGC CTCTCACACA CACACAATC GAG      713

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC AAAGAGGCCT AAGAGATTCA GGACCTGCAG AGTCGCCAGA AGCATGAAAT      60
TGAATCTTTG TATACTAAAC TGGGCAAGGT TCCCCTGCT GTCAATTATC CCCCAGCTGC      120
TCCTCTGTCT GGGAGAAGAA GGAGACCCAC TAAAGCAAA GGCAGCAAGT CTAGTCGCAG      180
CAGCTCATTT GGCAATAAAA GCCCACAGCT TTCAGGCAAC CTGTCTGGTC AGAGTGGAAAC      240
TTCAGTCTTA CACCCCAAC AGACCTCCAC AGTCGAG      277

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT AAGGCTACCG ATATTGGAGA AGCTAACTAT GGGTTTTACC      60
ACACGTAACA GCTTTTTGGT GAAATCAGTT GTTATACTAA TAAGCTTTCC TCTAATTGAT      120
TTGAGTTTTG GTTTTTGTGT TTGTATTGTC GGGTTTTGTC TCTTTTGTTC TCTTGTTTTT      180
AGTAAATTGG TTTTCTTCA ATGTATTTTC TTAAAGTAGT CTAGCTTTAC CCAGTTTCCT      240
TGGCAAATTG AAATTTAGGC CATGAAGGCC GAATTCGGCC TTCATGGCCT ACTCAGCCTC      300
CCCAAGTAGC TGGGACTACA GGCCTGTGCC ACTATTCTCA GCTGATTTT GTATTTTATG      360
TGGAGACGGG TTTTGGCCAT GTTAGTTGGC CAGGATGGTC TCTCTCTCGA CGTCGTGATC      420
CGCCCGCCTC GGCTCCCAA ATTGCTGTGA TGACAGGCGT GAGCCACCCC GCNTGGCNTG      480
TCCTACCTCT TTTTAAAGAC CTCTTCCTGT AAGCACTGGA TAATCTACTT CTAGTAATGT      540
GAAACTGACT ATATNTTGAA TTCAATGTT TTCAATCAAC CTGTTGCAGT TTATATTTC      600
CACCTGCTC CCTTTTGACA GTTTAAGTAC AGATAGTCTC AGCAGTTCTG GAGACCATGT      660
AAAGCTCGAG      670

```

## (2) INFORMATION FOR SEQ ID NO:130:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAACAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTGTG ATCTGGTTCA      240
AGCTGAACAG AGATTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGCACA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTC AATTGA CTTTCCTTGG CTCCAACCC ACTTTACTCG AG                          462

```

## (2) INFORMATION FOR SEQ ID NO:131:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 535 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCAGT TAGGGTATAT      120
AACAAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTTGTCTA      300
TCACCTTTAG TATATTACTC TTTGGCAGAG GTTGTCTAAT CACATTAATT TTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCAATACCT TTCCAGAGA AATGGGGTGC ATATAATTTT      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG          535

```

## (2) INFORMATION FOR SEQ ID NO:132:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 401 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTTCAG GTGCGGCCCTG TGCAGATCGG CTTTTTGGTT TGGTTGTCTT GGCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTCTTT      180
TTGGACTTTT CTTTGGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC	300
GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA	360
CTGGATTTTG TCTCATTCTT CTTGACTTTC TGATCCTCGA G	401

## (2) INFORMATION FOR SEQ ID NO:133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA	60
ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG	120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT	180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAAACTG	240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT	300
GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA	360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTC	420
AGTTCGTAAG CATTTTTGGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA	480
GTGATGCATG GCTCGAG	497

## (2) INFORMATION FOR SEQ ID NO:134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 362 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGCAGTC AAAGTGAAC	60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT	120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG	180
GCAGCCAATT GTTCTTGGGG ATATATTCT AATGAAGTGC TAGACTATCC AATTACTTAA	240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT	300
CTTAATAAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG	360
AG	362

## (2) INFORMATION FOR SEQ ID NO:135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC TTCATGGCCT ACCCAATCA ATGGATCCTC AACTCCAAAT CCAAGATAG	60
---	----



CATCTTCTGT	CACTGCTGGA	GTTGCCAGTT	CACTCTCAGA	AAAAATAGCC	GACAGCATTG	120
GAAATAACCG	GCAAAATGCA	CCATTGACTT	CCATTCAAAT	TCGTTTTATT	CAGAACATGA	180
TACAGGAAAC	GTTGGATGAC	TTTAGAGAAG	CATGCCATAG	GGACATTGTG	AATTTGCAAG	240
TGGAGATGAT	TAAACAGTTT	CATATGCAAC	TGAATGAAAT	GCATTCTTTG	CTGGAAAGAT	300
ACTCAGTGAA	TGAAGGTTTA	GTGGCTGAAA	TTGAAAGACT	ACGAGAAGAA	AACAAAAGAT	360
TATGGGCCCA	CCTCGAG					377

## (2) INFORMATION FOR SEQ ID NO:136:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC	TTCATGGCCT	AAGCAAACCT	CATGCAGCTG	GTGGAACCTAG	ATGTGTCTCG	60
AAATGAGATT	CCTGAAATTC	CAGAAAGCAT	TTCAATCTGT	AAAGCACTGC	AGGTAGCTGA	120
CTTCAGCGGA	AACCCACTGA	CTAGGTTGCC	AGAAAGCTTT	CCTGAATTAC	AGAATTTAAC	180
ATGTCTTTCT	GTAATGACA	TCTCACTACA	GTCTCTACCT	GAAAATATTG	GCAATCTTTA	240
TAACCTGGCT	TCACTGGAAC	TGAGAGAGAA	TCTTCTTACA	TATCTTCCTG	ACTCTCTTAC	300
CCAGCTGCGA	AGACTAGAAG	AACCTGACTC	GAG			333

## (2) INFORMATION FOR SEQ ID NO:137:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC	AATGAAGCCT	ACTTTAGTAT	TTTGGCACTT	CCTAATTGAC	ACCTTGGGAG	60
ACTGCAGGAA	GGGAACGAGA	ATCATTNNTA	GGNTATTTGT	GTGTGTGTGT	GGTTTTTTTT	120
TTTTTTTGGG	AGACAGAGTC	TCACACTTTT	GCCCAGGCTG	GAGTGCACTG	GCGTGATCTC	180
GGCTCACTGC	AACCTCTGCC	TCCAGGGTTC	AAGCGATTCT	CTTGCCTCAG	CTTCCCGAGT	240
AGCTGGGATT	ACAGGCACAC	GCCACAACGC	CTGGCTAATT	TTTATATTTT	TAGTAGAGAC	300
AGTCTCGAG						309

## (2) INFORMATION FOR SEQ ID NO:138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC	AAAGAGGCCT	AAACTCAGAA	TGGTGCTACT	TGAAGACTCT	GGATCTGCTG	60
ACTTCAGAAG	ACATTTTGTG	AACCTGAGTC	CCTTCACCAT	TACTGTGGTC	TTACTTCTCA	120

GTGCCTGTTT	TGTCACCACT	TCTCTGGAG	GAACAGACAA	GGAGCTGAGG	CTAGTGGATG	180
GTGAAAACAA	GTGTAGCGGG	AGAGTGAAG	TGAAAGTCCA	GGAGGAGTGG	GGAACGGTGT	240
GTAATAATGG	CTGGAGCATG	GAAGCGGTCT	CTGTGATTG	TAACCAGCTG	GGATGTCCAA	300
CTGCTATCAA	AGCCCCCTGA	TGGGCTAATT	CCAGTGCAGG	TTCTGGACGC	ATTTGGATGG	360
ATCATGTTTC	TTGTCGTGGG	AATGAGTCAG	CTCTTTGGGA	TTGCAAACAT	GATGGATGGG	420
GAAAGCATT	TTGCAATCAC	AATGAAGATG	CTGGCGTGAC	ATGTTCTGAT	GGATCAGATC	480
TGGAGCTAAG	ACTTAGAGGT	GGAGGCAGCC	GCTGTGCTGG	GACAGTTGAG	GTGGAGATTC	540
AGAGACTGTT	AGGAAGGTG	TGTGACAGAG	GCTGGGGACT	GAAAGAAGCT	GAACCTCGAG	599

## (2) INFORMATION FOR SEQ ID NO:139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC	TTCATGGCCT	AACCTTCCTG	AATATCTGCC	GTTTGTCTCTG	CAAGAAATAA	60
CTAGTCAACC	CAAAAGGCAG	TATCTTTTAC	TTCATTCCCTT	GAAGGAAATT	ATTAGCTCTG	120
CATCAGTGGT	GGGCCTTAAA	CCATATGTTG	AAAACATCTG	GGCCTTATTA	CTAAAGCACT	180
GTGAGTGTGC	AGAGGAAGGA	ACCAGAAATG	TTGTTGCTGA	ATGTCTAGGA	AAACTCACTC	240
TAATTGATCC	AGAAACTCTC	CTTCCACGGC	TTAAGGGGTA	CTTGATATCA	GGCTCATCAT	300
ATGCCCGAAG	CTCAGTGGTT	ACGGCTGTGA	AATTTACAAT	TTCTGACCAT	CCACAACCTA	360
TTGATCCACT	GTTAAAGAAC	TGCATAGGTG	ATTTCCCTAAA	AACTTTGGAA	GACCCAGATT	420
TGAATGTGAG	AAGAGTAGCC	TTGGTCACAT	TTAATTCAGC	AGCACATAAC	AAGCCATCAT	480
TAATAAGGGA	TCTATTGGAT	ACTGTTCTTC	CACATCTTTA	CAATGAAACA	AAAGTCTCGA	540
G						541

## (2) INFORMATION FOR SEQ ID NO:140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

CTTCATGGCC	TAGTGGTTCT	TCTGAAATCG	GCCTTCAGAC	ACCTGTCTT	GGTAGTACCA	60
ATATCTAAGA	AGTGGTTTCA	GTTCAATTTT	GTTTTCTCTC	ATGCCAGAGA	GAAGCCACAG	120
TTTCCTAAGC	TGGGGAGGAG	GTATATCCTT	CAAGAGATCG	GCTTGTTAGA	ATAGACCACT	180
TAACACCATA	TGAAAAAGCA	ACAGACTGAA	ACATGGATGT	CCTCAAGAAG	GGCTGCTGAC	240
ACCTATGATT	TGGCAAGGAG	ATAAATAACA	GAATGTGCAA	AGGGTCATAA	GAGTGCAGAC	300
ACCCTAATGT	CTGTTGGCTG	GAAGGTCAGA	GCAGTTCACC	AGTGAAAATG	GGTACGCCAT	360
GAAGGCCGGC	CTTCATGGCC	TATAGGCCAT	GAAGGCCGAA	TTC		403

## (2) INFORMATION FOR SEQ ID NO:141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```

GAATTCGGCC TTCATGGCCT AGTCCTCATC TGCTGGCATT TTGTGGGGTG TTAGTGCCAA      60
ACTTGAATAG GGGCTGGGGT GCTGTCTTCC ACTGACACCC AAATCCAGAA TCCCTGGTCT      120
TGAGTCCCA GAACTTTGCC TCTTGACTGT CCCTTCTCTT CCTACCTCCA TCCATGGAAA      180
ATTAGTTATT TTCTGATCCT TTCCCTGCC TGGTCTAGCT CCTCTCCAAA CAGCCATGCC      240
CTCCAAATGC TAGAGACCTG GGCCCTGAAC CCTGTAGACA GATGCCCTCA GAATTGGGGC      300
ATGGGAGGGG GGCTGGGGGA CCCCATGATT CAGCCACGGA CTCCAATGCC CAGCTCCTCT      360
CCCCAAAACA ATCCCGACAA TCCCTTATCC CTACCCCAAC CCTTTGCGGC TCTGTACACA      420
TTTTTAAACC TGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```

GCGATTGAAT TCTAGACCTG TGTGTCTAGC TGTGATGGAA TCTGAAATGA AGTTTGACAA      60
GGACCATGAT GGAATCATTG AAAATGGAGG CTATGCAGAC CAGACCTATG ATGGATGGGT      120
GACCACAGGC CCCAGTGCTT ACTGTGGAGG GCTGTGGCTG GCAGCTGTGG CTGTGATGGT      180
CCAGATGGCT GCTCTGTGTG GGGCACAGGA CATCCAGGAT AAGTTTCTT CTATCCTCAG      240
CCGGGGCCAA GAAGCCTATG AGAGACTGCT GTGGAATGGC CGTTACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

```

GAATTCGGCC TTCATGGCCT AGGGAGGCTG AGGTGGGAGG CTCACTGGAG GCCAGGAGTT      60
CGGAACCAGC CTGAGCAACA TAGGGAGACC TCAGCTCTAC AACTGAAAAA AAGATAGCCA      120
GGTGTGTTCA TGGTGGCACC TGTCTGTATT CCAGCCGCTT GGGAGGCTGA GGCAGGAGGT      180
TTGCTTGAGT CCAGGAGTTT GAGGTTGCGG TGAGCTACAC AATGAGCTAT GGTGGCACTA      240
CTACACTCCA GCCTGGGCCA TAGAGTAAGG CCCTGTCTCT AACTGGAAGT CCAAAGAGGG      300
ATCTACTTCC TAGACTATTA ATTTAATAGA TCAATAAATT AATCAAGAAT ATGATTTTTT      360
TCTCATCTTT CTCTGTAGTC ATATTTTATA CAGACTTTTT GTTTAAGTAA TCTCTCTTTA      420
TGGGCAGACA ATGATTTTCA AACACCCCTG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

GAATTCGGCC	TTCATGGCCT	AGTCAGCCGT	GACTGCACCA	CCATACTCCA	GCCTGGGTGA	60
CAGAGCGAGA	TCTTGTCTTA	AAACAAAACA	AAACAAAACC	CAGACTTCCT	ATAATTCCTA	120
AAAATAAATG	TGGGTTTGAG	AGGCCTACCT	TGAAATGTAC	AAGATCCTGG	CCAGACTTCA	180
CCTATCTAAC	AATATGCTAG	TAACATTTG	TTGACATGTC	TTAAAGAAAT	GTTCATCAGG	240
GCCTCAGAAA	GCAAGGCAGA	GAACAGGTCC	CTGAAATTTA	CTAGCTTGCA	CCAAACCATC	300
AGATAAAGAT	AGGTTAATAT	TTGACAGAAA	AAACTCTTCA	AAAAGAGACA	GTGAAATACT	360
CTTGAGATGA	ATCCAGGCGG	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC	TTCATGGCCT	AGGCAGTGGG	GGCCTCTGTA	ATTCTAGCAT	ACAGGTGGCA	60
AGTTATTACA	TTATTTCTTT	CCTCCTGTCT	ACCTGCAGTT	GGTTTTATGT	GGGGCGTTAG	120
TACACTTCCC	AAAGGGCTTG	CCCGCAGGTG	AGAGGTGCAC	ATTGAACTCC	CTCACCAGGC	180
AGATGGGAAG	TGTGGCCATG	AGAGAGAGCT	TCAGGGGCCC	TGGGTTTATG	ACATCGCTGG	240
GCCAGGAATG	AGGTAAATAT	TTTAAATGGC	GAAGGGTGAG	CCCCGTTATT	ACCCGAGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC	TTCATGGCCT	ACTGGATGGC	ATCTACTTCG	TATGACTATT	GCAGAGTGCC	60
CATGGAAGAC	GGGGATAAGC	GCTGTAAGCT	TCTGCTGGGG	ATAGGAATTC	TGGTGCTCCT	120
GATCATCGTG	ATTCTGGGGG	TGCCCTTGAT	TATCTTCACC	ATCAAGGCCA	ACAGCGAGGC	180
CTGCCGGGAC	GGCCTTCGGG	CAGTGATGGA	GTGTCGCAAT	GTCACCCATC	TCCTGCAACA	240
AGAGCTGACC	GAGGCCCAGA	AGGGCTTTCA	GGATGTGGAG	GCCCAGGCCG	CCACCTGCAA	300
CCACACTGTG	ATGGCCCTAA	TGGCTTCCCT	GGATGCAGAG	AAGGCCCAAG	GACAAAAGAA	360
AGTGAACAA	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT      60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCCT TGTCCATGCT      120
CACAAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCTCC      180
AGATCCTGTA TATCCGCAGC ATCTCCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA      240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA      300
CGCCCCACCC CTACTTCTGT TTCTTCCTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG      360
GCAGCATGAA GCAGGCCCTG GGTGAACTGC AGGCACAGCA GCCCCCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GCGGGCTGCT GTACGTNTCA TGCAACCCCC      60
GGGCAGCCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA      120
TTCCCTTCCG GCCGGTCAAG GCTGTGGCAG TGGACCTGTT CCCGCAGACC CCTTCTTTT      180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA      240
TCATAAGATT GTGGTCTTGC TTTTACTTAA TTTTGTATC TTAGCGATGT CTAGAGTTAA      300
TAAGTGTGTC TTTTCTAATC ACAGCAAATC TCGAG                                335

```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGGCAC TAGGATCATC ATTTGGGTGA GAGCCCTCGG      60
CAATGGTGGA GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGGTCCGG AATTGTGTGG      120
TCCTACGCAG CTTGGTATTC TCCGTCTTGA GCAGGTAGAG CTTCTTGGCA AAGAACACCG      180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CACGGCCACG CACATCACCT      240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCCTTG TG CCAGATGTAG TCCTGCGTGT      300
TGCACCTGCA GAAGGCCCTT ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT      360
AACTTGGGAA GAGGTCGCAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCACTGC      420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA      480
AG                                482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

G TTCCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CATTGGTGGT      60
T TGGCATTCG CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTCCCATTT TTAAGAGAAT      120
A TGGGAACAT TTCATATGAT CTCCATCACG AAGATAGTGA AGATGCTGAA GAAACATCAG      180
T TCCAGAAGC TCCGAAAATT GCTCCAATAT TTGGAAAGAA GGCCAGAGTA GTTATAACCC      240
A GAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

G CTCGCCCCAC TTTATGAAGA GCGATTTCAC GGCTGCTTGA ACCATTGAA TTTGGATTG      60
T GTTCAGCAC TTAAAAGGT TCAACTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC      120
T TCTCCAGAT GACCGGTGGT TTCCTGAGCT GCATCTTGGG CTGGTGCTG CCCCTGGCCT      180
A TGGCTTCCA GCCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC      240
C CCACGCTGC ACTCTGGCT ACAATACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

```

G AATTCGGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC      60
C GAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA      120
A CGGCCGCGG TTCGGGACGG CCTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA      180
C AACTGGGGC TTCTGACGT CCACCCTTT CAGGGCGCGG CCCCAGTAGC CCTCGGGCCG      240
G CCCAGGTAC AGGAGGTGCT TCCCGGACC CCCGAGTAC CTGGAGGGAC CTCCGAGGG      300
G ACTCGAG                                308

```

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCGGCC	TTCATGGCCT	ACAATCCCAA	ATGTAGGATC	ATGCCCATTG	CCCTAAGCCC	60
AGGCATGAGA	GTCGACATCT	CTCCTCTTAT	ATACAGATCC	AGTCCACAGG	TGAAGTGGGA	120
ACTCTCCAAC	CAGGATTGAG	CACACCATTG	ATGTTGCGAC	TCCTCTACTG	GAACACAGCT	180
TGGAGAAGGG	ATTGGGGCTC	TCATGGCAGG	ATGCAATCCA	CTGTTGAGAT	TGTGACTCAT	240
GCACTTGAAC	CTAAGTCTCA	GGAGTTGTTG	ACTCTTACAC	CCAGCACCCA	GGTGATAGGA	300
CTCTCATGTC	TGGTTCCTGC	CCACAGGTGA	AATTGTGACA	TATACATGGT	CACAGCTCAC	360
AGGTGAGGTG	ATAACTCACA	TACCTGGATC	CAGCTAAGAG	AACAGATTTT	GACTCTGATA	420
TCTTAGGCCA	TGAAGGCC					438

## (2) INFORMATION FOR SEQ ID NO:154:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCT	TCATGGCCTA	CAAGATGACT	AAAGTCTTCA	CTCACCAAGG	AAAAGTGGCT	60
CTGTATGGCA	AGCTGGTGCA	GTGAGCTCAG	AATGAGAGGG	AGAAACTTCA	AATAAGATA	120
GATGAGATGG	ATAAAATACT	TAAGAAGATC	GATAACTGCC	TCAGTGAATG	GGAAACAGAA	180
ACTAAGAATT	TGGAGGATGA	AGAGAAAAC	AATCCTGTGG	AAGAATGGGA	TTCTGAAATG	240
AGAGCTGCAG	AAAAGAATT	GGAACAGCTG	AAAAGTGAAG	AGGAGGATGC	TCTCGAG	297

## (2) INFORMATION FOR SEQ ID NO:155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC	TTCATGGCCT	AAATTTAGGA	AGGTCAAACG	TGAATCTCCA	TTTGACAAAC	60
GTCCAAGTGC	AGCAGAGATT	AAAGTGAAC	CCACCACTGA	GTGATTGGAC	AAAGAGGGCA	120
AAGGTGAAAT	TAGAAGCCTA	GTGGAGCCAC	TCAGTATGAT	CCAATTTGAT	GATACTGCTG	180
AGCCACAGAA	AGGAAAAATA	AAAGGAAAGA	AACACCATAT	CTCTTCAGGA	ACTATCACAA	240
GCAAAGAAGA	AAAACTGAA	GAGAAGGAAG	AGTTGACCAN	ACAAGTCAAG	TCTCATCAAC	300
TTGTTAAATC	ACTCTCAAGA	GTGGCTAAAG	AGACTTCAGA	ATCTACCAGA	GTTCTAGAAA	360
GTCCAGATGG	CAAAGTGAA	CAGCGTAACC	TCGAG			395

## (2) INFORMATION FOR SEQ ID NO:156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TTCATGGCCT	ACAGAGTACT	GAGTGAACA	TACGATGATA	GATTTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TTAAGTTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAAATTT	TGTTGCATTT	TAGATAATCG	TCCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTTTGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTGTGA	GGGTATTTAG	300
CAGCATCCTG	GCCTTAAAC	AAAAATGTTT	TCAGACATTG	CCAAATGTCC	CCCGAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGCTCTA	TACAAAGAGC	TGTTATTAGA	GCCAGACTCG	420
AG						422

## (2) INFORMATION FOR SEQ ID NO:157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCCAAC	60
ATAGTGAGAC	CCCCTTCTCT	ACCAAAATTT	TAAAAATGAG	CATGCATCTG	TAGTCCTAGC	120
TATTGGGAAG	GCTGAGGCAG	GAGGATCATC	TGAGCCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	ACACTGAAAA	300
CTGTAGATGT	TACTTATAAA	ACACTGGCAC	TCAGATAAAT	TGGGTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCTGTTGG	GCCAGAGGCT	GTTATCGTTT	TGCTCTGAAT	TCAAAACCTG	420
ATATGTCTCC	AAATTTGCTT	AGGGTTGTTA	TCCTGGAAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

## (2) INFORMATION FOR SEQ ID NO:158:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGGAGTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAAC	AACAATGCTG	GAAGTGGGCA	GCAGTCAGTG	AGTGTCACAA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTTCA	AAAGAAGACA	TGCATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TCGGAAAAAA	CATTGCAAAC	ATGTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

## (2) INFORMATION FOR SEQ ID NO:159:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs



(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGACA	120
CCCCTCCCCA	GGCAGGTGCT	GCCCCAGGAG	GACTGTCCTC	GGGAATGAAC	CTCCCGCGGG	180
CTTTGGACTG	AGGTCCCTGT	GGCCTCGGTC	TCCTCCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTTA	GTGTACGATG	TTTGCTGTGC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGCTAC	CCCTCCCGGT	CCCGGCCCTG	GCCCAGCCAG	360
CCCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTC	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTCACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTTACAA	AACGCGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATGG	CCATATTTT	GTTTATGCTT	TGTCACAGGC	TTAGTCATT	120
GCTTCCATGT	GTTTTCATCC	TTCAGGATAT	CTTCAAGAAG	CCTACTTATG	GACCAAACAA	180
GTTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TTGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTTT	GGCCATCCGT	GGCTTAAACA	ACACTTTGCA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTGA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA    60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTAACTCCTT TTGATCTTCT GTGATAGCGA    120
TTTTTCACAT TTCACACTTC CTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC    180
TTTCTTATCC TGCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT    240
TTTCAGAAGT TACAGCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```
GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA    60
GGTAATCAAA GCAGAACTG ACAAATGAGA TGGTATCAAG CTAAAAAG                      108
```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```
GAATTCGGCC AAAGAGGCCT AGTTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC    60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTTCC1GA GAATCCTCTG    120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTTATTATG AATGCTGATA CTGCTCCAAC    180
ATCTCCTTGT CCTTCCATAT CTTCCAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA    240
GAAGATCGCC AGCATGTTG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG                292
```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAAGA GTTGTGATT ACTTTTCATT	60
CCACTTTCTC ACCCCCATTC TCCCCTCAAT TAACTCTCCT TCATCCCAT GATGCCATTA	120
TGTGGATTCC TCGAG	135

## (2) INFORMATION FOR SEQ ID NO:166:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGGA GTCTGAAATA GCAAGCGAAG	60
AGAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC	120
CTACAGATGA ACTGAAAGAC TTAAACATTA TTAAAGTTAC TGATAAAGAC TGTAATGAAT	180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG	240
AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAACTCT AAAACCTCGA ATGTCAGTAA	300
GTGCTGATGA AAGAGTGGT TTAGAGAATA TGAGGCCCC TAACAACAGC AGTCCAGTAC	360
AAGAGGATGC TGAAAATGCA TCTTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC	420
TGTCATCTCA TTAATTAGCC AAATCGAG	449

## (2) INFORMATION FOR SEQ ID NO:167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGA TGACCCAGGC	60
TCCGTTACAT ATACTTGAT TCCAGCTGGG ACCTAGATT GCTGAGGACG GAAGCCAAGG	120
AGACAGGAAC ATGTGGCTGC TCCCAGCTCT ACTCCTTCTC TGCCTCTCAG GCTGTTTGTC	180
TCTGAACGGC CCCGGCTCTG TGAATGGCAC TGCGGGGGAC TCTCTGACAG TGTGGTGTCA	240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC	300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGTC	360
CATCAGAGAC CACCCGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA	420
TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCACG	480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCCAGCA ATTACAACCC CAAGGAGGAC	540
CACACATCCA GCCACCCGCG TCGAG	565

## (2) INFORMATION FOR SEQ ID NO:168:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTG ATTCCATCCT      60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTGTGTTTC      120
AGTTCCCAAA TTTCCATGTG CCACAAACAA ATCTCGAG                                158

```

## (2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA      60
TTCCCTCTCA CCAAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTTCAACT      120
CTAGTTTCCC CACTGCAACT CTTCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA      180
GCTACTTCCC TATTTTCTGT TCCCTTTAC AGGAAACTT TTCTCCAGCA TTTCCCAATG      240
CCATTGTCTT ACTTCCTCAC ATTCTATTTT CTCTCAAAC CATTTTTATT AGGCTTCTTT      300
CCCCAATGGC TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCCTAT TCTCCAGGTC      360
TTCTTTCTTC CCAGTCTCTC GAG                                              383

```

## (2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG      60
TCTCTCCTCC TGCCATTAT ACTGCAGGTA TTCCCAAGT TTCTCTTCTC AACCTTTGCC      120
TCCTTTTCCC TGCTTGCTCC CTTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC      180
ACTGACCTGT TTGTCCACAT CTTGAGTAT CCCACCACCA TTTCACACCC AGCATATCCA      240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTG AG                                              282

```

## (2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT AGTGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC      60
TGTTCTTATT CCACTGGTTT CTTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA      120
CTTCCACAG GGCTGCACTA GCACAGCCAG CCTTTGCTTT TACAGCCTGC TCTTGCTTAT      180
TACCATACCA GTGTATGTAT TCTCCACCT TTGGAATTGG ATGGGTATTA AACTCTTCAG      240

```

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC 300  
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGGCGG AACTCTCGAG 350

## (2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 140 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTCTAG 60  
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTG 120  
GGTTAGGTGC AACGCTCGAG 140

## (2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCCTGCC ACTCCCCTCT TCTTTTTTTT CCAACATGGC CTTGCTCCGC 60  
GTACATCGCC ACCCAGGGAC CGCTGCCCGC CACCGTGGCT GACTTTTGGC AGATGGTGTG 120  
GGAGAGCGGC TGCCTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA 180  
GTGCTACCAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240  
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300  
CGAG 304

## (2) INFORMATION FOR SEQ ID NO:174:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 188 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60  
AGGCGCTATT GGCAGGACCT AGAACTTTC CTTGTAAAT AGCTAGTATG TTCCCTCTGC 120  
CCCTTCTTCA TCTTTTCCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG 180  
CACTCGAG 188

## (2) INFORMATION FOR SEQ ID NO:175:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTGGGCC	TTCATGGCCT	ACTATCTGCC	TTGCGCTCCC	ACTGCCCTGA	CCTGTGCCCT	60
CTCACAGGCC	CCCGTGATGG	CTCGCTGGCC	TCCCTTCGGC	CTCTGCCTCC	TCCTGCTGCT	120
GCTGTCCCCA	CCGCCACTGC	CCTTGACAGG	GGCCCATCGC	TTCTCCGCAC	CTAATACCAC	180
TCTCAACCAC	TTGGCACTGG	CACCTGGCCG	AGGCACACTC	TATGTCGGCG	CAGTGAACCG	240
CCTCTTCCAG	CTCAGCCCCG	AGCTGCAGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 327 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GGTCAGCCGA	GCATGATAGG	AGACATCATC	AACCTCGGCC	TGAAAGGGAG	GGAGGGGAGA	60
GCAAAGGTCG	TCAACGTGGA	GATCGTGGAG	GAGCCCGTGA	GTTATGTCAG	CGGGGAGAAG	120
CCGGAGGAGT	TTTCCGTCCC	ATTCAAAGTG	GAGGAGGTCG	AAGATGTGTC	GCCAGGCCCC	180
TGGGGGTTGG	TTAAGGAGGA	GGAAGGTTAT	GGAGAAAGCG	ATGTCACATT	CTCAGTTAAT	240
CAGCATCGAA	GGACCAAGCA	GCCTCAGGAG	AACACGACTC	ACGTGGAAGA	AGTGACAGAG	300
GCAGGTGATT	CAGTGGGCGA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTGGGCC	AAAGAGGCCT	AAGCAATGTC	TCCACCACTG	CTGCTGCTAC	CCTTGCTGCT	60
GCTGCTGCCT	CTGCTGAATG	TGGAGCCTGC	TGGGGCCACA	CTGATCCGGA	TCCCTCTTCG	120
TCAAGTCCAC	CCTGGACGCA	GGACCCTGAA	CTACTGAGGG	GATGGGGAAA	ACCAGCAGAG	180
CTCCCCAAGT	TGGGGGCCCC	ATCCCCTGGG	GACAAGCCTG	CCTCGGTACC	TCTCTCCAAA	240
TTCCTGGATG	CCCAGTATTT	TGGGGAAATT	GGGCTGGGAA	CGCCTCCACA	AAACTTCACT	300
GTTGCCTTTG	ACACTGGCTC	CTCCAATCTC	TGGGTCCCGT	CCAGGAGATG	CCACTTCTTC	360
AGTGTGCCCT	GCTGGTTCCA	CCACCGCTTC	AATCCCAATG	TCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```
GAATTCGGCC AAAGAGGCCT AGGAGGAATT TCCATCTTGC TCTCAAAGTG AGTCTGAATG      60
TGCTCGGTGG TGTCACCCCC GCCGAGCTGC CAGTGCAGAA GGCCACTATT GAACTCCTGC      120
ACACGCCCCA ACTTGTGAGA TCGGTCAACA ACAAACAGGT TGTTCCTTTT GACTATCTTT      180
ATTGGCAGCT TGTCGAACTT ACTGGCTTGC TTGGGCTTCT CCTTTGGGTC TGCAGCGGCG      240
TCCGGGGCAG TCAGAGCGAT GCTGCTCTTT TCATCGCTTT CTGTCTTCTC GCTGTCTACC      300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```
GAATTCGGCC AAAGAGGCCT AGTGCAGCAA TTTAGAGAGT GTCTCAGGAG TGTGGCTCAC      60
TGGCAGCTGC AGCTATGTTA GTGCTTCTTT CTGCCTCAAG TTCAGAAACA AGCTGGACTA      120
TCTCAGGGTG ATTGAATTTT CCTGCTGTGG AATCATAGAA GTCTTGCACT CTCCCAGGTT      180
TGTGTTCAAG GTCTTCATAT TCAGATGCTT GAAGAATCAT TTCACATTGG TCTAGCATTC      240
AATCGAG                                     247
```

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```
GAATTCGGCC AAAGAGGCCT AGTCAAGTTC ATTTCCCAGA GTCTTAAGAC TAAGTTCTGC      60
CTCCTCATTG CAGGTGTGCC GAGAGTTTTT TTTGAACAAC AAAAATTACT AAGGAACTC      120
ACTACCTTTG GCGGTAGAAT TAGAAAACAG ATTCAGCAGT CACCTACTCC CCTTCAGTAA      180
TTCGAGACAA TTATTTTTCT CCTGACACAA CATCAGGTCC CATGAAAAAT GACACCGTGC      240
CTGGTGTTTT TGGGTTCTTT AATGCTTCTT TTAGAGCCAC ATTTTCTTTT TCAAACCGAG      300
TTCCCATCGC TCGAG                                     315
```

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC	AAAGAGGCCT	AATTTTCTT	CACGTTCTTT	ATCACCACCA	TGGTTATGTT	60
GGCTGCCCTG	GCTCACCATT	TGTTTTACTG	GGATGTTTGG	TTATATATA	ATGTGTGTTT	120
AGCTAAGGTA	AAAGGCTACA	GGTCTCTTTC	CACATCCCAA	ACTTTCTATG	ATGCTTACAT	180
TTCTTATGAC	ACCAAAGATG	CCTCTGTTAC	TGACTGGGTG	ATAAATGAGC	TGCGCTACCA	240
CCTTGAAGAG	AGCCGAGACA	AAAACGTTCT	CCTTTGTCTA	GAGGAGAGGG	ATTGGGACCC	300
GGGATTGGCC	ATCATCGACA	ACCTCGAG				328

## (2) INFORMATION FOR SEQ ID NO:182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC	AAAGAGGCCT	AGTTGTGGAA	AAGAAAGACT	GTGAGGGTAG	GCACAAGAGC	60
ACTCAAATGT	CCCAGGTAGA	GAAAACAACA	TGTATGATGG	CCCAGAAGGA	GGCAAGTCTC	120
GAG						123

## (2) INFORMATION FOR SEQ ID NO:183:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC	AAAGAGGCCT	ACTTGGACAA	GTAAGAAAGT	GATGACCCAG	GCTCCGTTAC	60
ATATACTTGG	ATTCCAGCTG	GGACCTAGAT	TTGCTGAGGA	CGGAAGCCAA	GGACACAGGA	120
ACATGTGGCT	GCTCCAGCT	CTACTCCTTC	TCTGCCTCTC	AGGCTGTTTG	TCTCTGAAGG	180
GCCCCGGCTC	TGTGACTGGC	ACTGCGGGGG	ACTCTCTGAC	AGTGTGGTGT	CAGTATGAGA	240
GCATGTACAA	GGGATATAAC	AAGTACTGGT	GCCGAGGACA	GTACGACACG	TCATGTGAGA	300
GCTCACTCGA	G					311

## (2) INFORMATION FOR SEQ ID NO:184:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC	AAAGAGGCCT	AGTTCAATCT	GTAACAAGCC	TTCTTCAATT	TCCTCTCCAC	60
ATACCCTGCA	TAGACTTTAA	GATTCTCTG	CTCGATGCTA	ATAAGAAGAC	ACACACCCCT	120



CGTTCTCGAG

130

## (2) INFORMATION FOR SEQ ID NO:185:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC	AAAGAGGCCT	AGGAGGGGGA	AGAGAGTCCG	TTTGCAGAA	GATGAAGAAA	60
AGAGTGAAAA	TTCCTCGGAG	GACGGTGACA	TAACGGATAA	GAGTCTTTGT	GGAAGTGGTG	120
AAAAGTACAT	CCCACCTCAT	GTGAGGCAAG	CTGAGGAGAC	AGTGGACTTC	AAGAAAAAGG	180
AAGAAGTAGA	AAGCTGAAG	AAACATGTAA	AAGGTCTACT	TAACAGGTG	AGTGAACCCA	240
ACATGGCTTC	CATCAGTGGG	CAGCTGGAGG	AACTGTACAT	GGCCACAGC	AGAAAGGACA	300
TGAATGACAC	CCTGACCTCC	GCTCTCATGG	GTGCCTGCCG	CACTGCCTCG	GCCATGCCCA	360
GCAGACTGAT	GATGGAGCAT	GTTCTCTTAG	TCAGCATCCT	TCACCACTTA	CTCGAG	416

## (2) INFORMATION FOR SEQ ID NO:186:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC	AAAGAGGCCT	ACTACATTTT	TACCTAAATT	TATAGAAAAT	CAATTCGGAT	60
TGACATCCAG	CTTCGCAGCT	ACTCTGGAG	GGGCTGTTTT	AATTCCTGGA	GCTGCTCTCG	120
GTCAAATTTT	AGGTGGCTTC	CTTGTTTCAA	AATTCAGAAT	GACATGTAAA	AACACAATGA	180
AGTTTGCACT	GTTACATCT	GGAGTTGCAC	TTACGCTGAG	TTTTGTATTT	ATGTATGCCA	240
AATGTGAAAA	TGAGCCATTT	GCTGGTGAT	CTGAATCATA	TAATGGGACT	GGAGAATTGG	300
GAAACTTGAT	AGCCCCTTGT	AATGCCAATT	GTAACGTACT	CGAG		344

## (2) INFORMATION FOR SEQ ID NO:187:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCA	AGAGCCTAAA	ATCTACAAGC	ACCAGGAAGT	CAAGATGCAA	GCACCAGCCT	60
TCAGGGACAA	GAAACAGGGG	GTCTCAGCCA	AGAATCAAGG	TGCCCCATGAC	CCAGACTATG	120
AGAATATCAC	CTTGGCCTTC	AAAAATCAGG	ACCATGCAAA	GGGTGGTCAT	TCACGACCCA	180
CGAGCCAAAGT	CCCAGCCCAG	TGCAGGCCGC	CCTCAGACTC	CACCCAGGTC	CCCTGCTGGT	240
TGTACAGAGC	CATCCTGAGC	CTGTACATCC	TCCTGGCCCT	GGCCTTTGTC	CTCTGCATCA	300
TCCTGTCAGC	CTTCATCATG	GTGAAGAATG	CTGAGATGTC	CAAGGAGCTG	CTGGGCTTTA	360

AAAGGGAGCT TTGGAATGTC TCAAACTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG	420
GCTGGGATTC CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC	480
GACTCGAG	488

## (2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAAACA TATCAAAATG TTACAAAAAT	60
GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG	120
TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG	163

## (2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC	60
TCTGCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTT TATCAGGTCT CTGCCCTCCT	120
GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTGAG ACTGTGACTG GTAGGAGTGC	180
TGTGCTCAGC TTTCCACTTG AGTGTATATC CAAGAAGTTG GATAACCCTC TCAAGTTATG	240
GCCTCCATTG CAGTGCCTC CAGTCTATGG GGATGCATTG CACTCACCTT TGGGCTAGG	300
GCAGGTCGAG	310

## (2) INFORMATION FOR SEQ ID NO:190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 516 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTACT TTTGCGGCTG TGTTTCTCTG	60
AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAGTTTC	120
TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAAT	180
AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCACGTACC	240
TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG	300
GTGCGTCCTA AGCCAGTGTT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA	360
TGTTCTTGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT	420
GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGA AGTCCTGCAA	480

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

## (2) INFORMATION FOR SEQ ID NO:191:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT      60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT      120
GCAGAGATTG AAAAGAATAG TATTTGATGC CAAATCTACT ATTGTGTCTA TATTCGAAGAG      180
CTCACCCTG ATGGGCTGCT TTCTCTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG      240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTC      300
TAAAAGTGAA AATCTCGAG                                     319

```

## (2) INFORMATION FOR SEQ ID NO:192:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTCT      60
GGTAAAGAT GACAGTGAAT TGTATGGGCG ATGGATTAGC CGTGAAGGT GTTGAGTATA      120
AGTGGTCTCC AGCCAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT      180
TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCAGCCCC AAATACTGT      240
ACAGTTTAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAATT GCTGTAACAG      300
CATATCCTCA ATGCCATCA ATTCTCCACG TCCAACCTCT CCATGGCCTC CTCTGCCTCT      360
GCTGATCTGT GAACTTCTCG AG                                     382

```

## (2) INFORMATION FOR SEQ ID NO:193:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT      60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA      120
GGTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAAA AAAACCTCC TACAATAAAA      180
CTGAAAAAAT GCACAAAGAC ATATTAGTGG AAGACCACTG CTTGTTTAC ACAATGAAG      240
AGTATAAAGC AGAGAAGTGC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA      300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC      360

```

CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG 420  
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

## (2) INFORMATION FOR SEQ ID NO:194:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60  
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGGAAA AAGTATAAGG 120  
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180  
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA 240  
 AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAGC AAGGATACTA AGAAAATAGA 300  
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAAAA 360  
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420  
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCATGGAAG 480  
 AAGTAAGCAA ATGCTCGAG 499

## (2) INFORMATION FOR SEQ ID NO:195:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC 60  
 CATTCATATA ATATTTTAGT AGGTGTTCAA TTTTATTGGA TATTCTTTTT TTTTAATTGT 120  
 CTTTGATACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTTGAGGAGA GGGAGAACCG 180  
 AAGATTACAG GAGGCCAGCA TGAGGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAAC 240  
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300  
 GTTGAATAAA GAGCTCCTTT TGACCAAAAC CCTCGAG 337

## (2) INFORMATION FOR SEQ ID NO:196:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60  
 ATCCTCACTG GACGGCTTCC TGTTTCCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120  
 AAGTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TCGGTTTCA GCCGGTTCAG 180

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACTTGGGC CTGGGTTGCC	300
CCCCAAACCA TGTTCAGCCA CACGCCTACC AGTTCACCTA CCGTGTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

## (2) INFORMATION FOR SEQ ID NO:197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC TTCATGGCCT AGTTTTGTC TTTTTTCTT TTTTGGTATT ATTTGTTTG	60
CCACTTATTC CTAAAATTCA TATGCTATT AACCGTACAC ATCTTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACGCACACA CACACACACA CACAGCTGT GCATCTCTCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTTA TGACTGTTTT ACCAAATTGT GTTCTTAATA TATACAATGT	300
TGGCTTCTTT TTAGCCATTC AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA	360
CTGAAAACAG GTAAGTTTCT TTCTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

## (2) INFORMATION FOR SEQ ID NO:198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAACT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAAGTC CTTGTCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCTGGATG CTCAGGAGCT GCACCAAGTGA CACCAAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATTT TGTTGAGAGA ATTTGAAGAA AGGCTCGAG	349

## (2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCATTGTG TGACTAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

TTAATTAGTT TTTGTGTTTG AAGTTCCAGA ATCTCTTCCT GGCCTATGTA TTGTGTTCCG	180
TTGATGGATC TTTCCATCCC ATGGTACCCT TTAATTATTAT TGTCTTCATT TTTATTACTA	240
TTGTTATGCC CTTTCTCTC TCCGTGCACA TCTTCATGTT TGAACCTAA AAACACACCG	300
CCAACGCTCG AG	312

## (2) INFORMATION FOR SEQ ID NO:200:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT	60
ATAATAGAGA GATATTCACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAG	120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTTG TATGGAGAAA ACCTGGAGAA	180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTGTGGCG	240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTAAATACA	300
GGAGTGATAC CAGATTTATA TGTTTTTAAA ATGATTACTT GGTGTAATT AAAGAAAAGA	360
TTGGATGATT TAGGCAGATC TCGAG	385

## (2) INFORMATION FOR SEQ ID NO:201:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC	60
TTTTCTTCT TGCCTTCTT TTGATTACTT ACTTCTACC ATTCTATGTT TTTCTGCTACT	120
AGTTTGAAAA TTGTATACTT TGTTTTTATT CTTTCAGTGG TTACCCTAGA AATTACAACA	180
AACAAAATT GCAACAACCT CGAG	204

## (2) INFORMATION FOR SEQ ID NO:202:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA	60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA	120
AGTTTCCCT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGTA CCAATGAAAG	180
AGGCTGGATA ACCTACCAGG GATTCTTTC CCAGTGGACG CTCACGACTT ATTTAGATGT	240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC	300

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAACAAAC	360
TCAAAGAAAT GTGTTACAGAT GTAATGTAAT TGGAGTGAAA AACTCTGGGA AAAGTGAGT	420
TCTTCAGGCT CTTCTTGAG AAGACTCGAG	450

## (2) INFORMATION FOR SEQ ID NO:203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 558 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTCA	120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTTCTGTT TGGTAGCCAT TAAGCAATAG	180
TTTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTAG TTCCTTAANA	240
AGTTTTTCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA	360
CAGATCTCTA TCATATTATA AAGGGCATTT TGGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGTACC AAAGATACAG TCCTTTACAA	480
TACTGAAATC CTGGTTCCAA TTTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT	540
CTTGGGACAT CCCTCGAG	558

## (2) INFORMATION FOR SEQ ID NO:204:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCTCT ACAAAGCTCT	60
TCAACCACAC TCATTTCAAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG	180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACTTT TCCTTTGGCC	240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

## (2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT	60
---	----

CGCTTGGGTC CAGATCTGTA TTCCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATTT	120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAAATGTTA	180
ACTAGTGTGT TTTCAAGCTT CTATTCTTAG GCATGTTACT TCCTTTTGGG AGTCAAAACC	240
AACCATCTTT TAAGTAAGAG GGCTAACCAA ATATGTGCCA CACTAACTCG AG	292

## (2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT	60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTT ATGACTTTAA	120
CAAGAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA	180
CACTTCCATT GTTATGCCAC CCATCTCGAG GCAGGTCTAG	220

## (2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 333 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAAATGG CCAAGGCTAC TGGGAACTA AAGCCAATT CTAAAGATCA GGTATTGGCC	60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT	120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCCAGC CTGCATCAGC ACCTGCTGAA	180
GATTGTATTT CCAGCAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA	240
TTATCCTCTA AAGCAAAGAG TGCACAAGGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG	300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG	333

## (2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 316 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCAGTGTG GGCTTACCTG TGAGCACAAG	60
GCCGACCTTC TCCCTATCAG TGCATCCGTC CAGTTTATTA AAATTCCTGC ACAGTTACCC	120
CACCCCTGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG	180
TGTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG	240
TGTGTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCACAT TGGCCTTGTT CCTCAGCAAC	300
CCCCGGACCA CTCGAG	316



## (2) INFORMATION FOR SEQ ID NO:209:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC AAAGAGGCCT ATGTCCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT    60
GGGTGGTCCA AATTGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGTCTGGTT    120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA    180
CCAAGAATGA GTTTTCTGGA ACTGGTTAAA GTGTCACAGT AGGGAGTAAG GAAATAAGAA    240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG    300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTTGTAA    360
TAGTCTGACT TTAAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTTGTAGGC    420
TATATGGTCT CTGTCCCAAT TACTCCATTC TGCTACTGTA GCATAAAAGC AGCGATACAT    480
CCTAAACCCG TCGATTGAAT TCTAGACCTG CCTCGAG    517

```

## (2) INFORMATION FOR SEQ ID NO:210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG    60
CAGCTCCCCG ATGGGTCCTG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCA GGACTGGTGA    120
AGCCTTCGGA GACCCTGTCC CTCACCTGCA CTGTCTCTGG TGATTCCATC AGTCATTACT    180
ACTGGACCTG GATCCGGCAG CCCCCAGGGC AGGGACTGGA GTGGATTGGA TATTTCTATT    240
CACC CGGGA CTCCAACCTAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA    300
CGTCCACGAA CCAGTTCTCC CTAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT    360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC    420
GCTGGGGCCA GGGAAACCCG GTCATCGTCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT    480
TCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGGT    540
CAAGGACTAC TTCCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG    600
CGTGACACC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCAGCGTGGT    660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC    720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAAA CTCACACATG    780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC    829

```

## (2) INFORMATION FOR SEQ ID NO:211:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTG GTAAGCTTTA 60  
 ATATAACTAC CTGTTTTTTT GAATACAGAT AATGCAAAAG AAAACCATTT TATACTCGGC 120  
 TATATACCTT CCACCACTCG AG 142

## (2) INFORMATION FOR SEQ ID NO:212:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

GAAATTCGGC CAAAGAGGCC TAGTGAATC ATTCTGCCAC ACCATTTTCCT ACTCAAATAG 60  
 GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA 120  
 CCAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC 180  
 TCTATTTTAC TTGCTGTACT GTTGTACTGT TTATTTAAGA AACAAGCTGG TGGTTGATGT 240  
 CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT 300  
 GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC 360  
 AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA 420  
 AATGACCTCT TTCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA 480  
 GCCGGGGGAG GAGGGGCGGC GGCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG 540  
 GCCTCTTTGG CCGAA 555

## (2) INFORMATION FOR SEQ ID NO:213:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGCGAGG GACTTAATCA 60  
 ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCTTC 97

## (2) INFORMATION FOR SEQ ID NO:214:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT 60  
 AAAACGTAAT CAGGAACCTTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA 120  
 TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTCAGCTAG 180  
 AGATTCTGAA CAAGTTGCAG AATTAAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA 240

CTCACAATCT	GTGGAGATCA	CCAAACTACA	GACAGAAAAG	CAGGAACTGT	TACAGAAAAC	300
AGAAGCGTTT	GCAAAATCAG	TTGAGGTACA	AGGAGAGACC	GAGACTATAA	TAGCCACCAA	360
AACTACTGAT	GTAGAAGGAA	GACTGTCAGC	ATTATTACAA	GAGACCAAAG	AGTTAAAGAA	420
TGAAATTAAA	GCTCTGTCTG	AGGAAAGAAC	TGCCATTAAA	GAGCAGCTGG	ATTCATCTAA	480
TAGTACC						487

## (2) INFORMATION FOR SEQ ID NO:215:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC	AAAGAGGCCT	ACTGGGCCTT	TCAGCACCTG	CTCCAGCTTC	ACCTTGGTGA	60
ACATCAGGTT	GAAGTTCTCA	GGGTGCTCGG	TGATGGCCAT	GTTGACAACA	TCCAGGGCAT	120
GCTGGTGGTG	CTTCTGGGCA	GAGAAGAGCA	GTGCCAGCAG	GTGGAGGGCG	TGGGCATCAT	180
CCTTGCGTAC	CTTCAGGGCC	TCCTGCAGCT	GCTCCATGGC	ACTGGAGATC	TGTCGGACGA	240
GGGCCAGCTG	CAGCGAGACA	TAGAGGATGA	CCTGGGGGTC	ACTGGGCGCC	AGCTGCTGAG	300
CCCTCTCCAG	CGTCTGCAGT	GCCTTCCGGT	GCAATTCATC	TTGCTTGGAC	TTCAGGGTGG	360
CGTCGGTGGC	CTGCAGGCTA	TAGGTGAGAC	CCAGAGCCAG	GTAGCCCTTG	GGGAGGAACT	420
CCCCGGCTTC	CTCTCCGAGG	CTGATCACCA	TCATGGCAAA	GTGCTCTGCT	TCCTCTAGCC	480
AGCGAAGGGA	CCCGATGCAG	ACCTTCGCGG	CCATCAGGGG	CACGGTGGGG	TCCGAGGGCC	540
GCAACTTCAC	ACACTCCCGC	AGCAGGGACA	CAGCGTAGGC	TGAC		584

## (2) INFORMATION FOR SEQ ID NO:216:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC	AAAGAGGCCT	AGACCTGCCC	TAAAGATAGA	GTCTTGATGC	ACCGTCTACC	60
TTGTCCCCAA	CCAAGAGTGA	GTAGTGCACA	GAAGTCTCCT	GGCACCCCTG	GAATCCTGCA	120
TTTTTAATGG	ACGAGCAGGG	CAGGAAAGAA	AAAAAAAACC	CAAACCCCAT	CACTCTGCCA	180
GCCCCGTGTA	CCAAAGCAGC	CCAAATCAGT	TACCTTGACA	ACTCTCATGC	ACAGACTGCA	240
CCAGCCTGTG	TTGCAAACAT	CACTGCCCCG	CTTCTAACAG	GAAGAGATAC	TCTTTTGGGG	300
GTCTTGACAG	GCCCAGGACC	AGAGCCCCTT	CTACCCAGGG	CCCTTCCAAA	GGCAAAGCAC	360
AGAGTCACAT	TTGGGCGTGG	CATGAGAGGG	AAATAAAGAG	ATTTGGCTGT	AGTGGGAGGG	420
AGGTTTCAGT	GCTTTTCTG	GGGACATTGG	TGCCTATCTC	TATTCTGAGA	GTTGTCTCTC	480
TCATAGGACA	CCATAAATCG	CATCCAGGAC	CTGCTGGCTG	AGGGTACTCG	AG	532

## (2) INFORMATION FOR SEQ ID NO:217:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC	AAAGAGGCCT	AGTGTGTC	GGTCTTATAC	AAAAACAACA	CAGTGAATGA	60
AGGAATAAAT	ATTTATTGAA	TGGAAAATCA	GCAAAGGAAA	AAATTGTATA	ATTGTCAATG	120
ACAATGGGAA	GCACATAGTG	AGGCTATGAG	TGATTTGGAA	ATCATGAGCG	TGCAGTGT	180
TGTTACGCA	TTTCGGTTGT	GTTTTCAGAA	AGTAACTACA	ACATAGCATC	ATGTAGCAGA	240
ATTGCTGGTT	GTAAGCAAAA	AGGCTCGAG				269

## (2) INFORMATION FOR SEQ ID NO:218:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC	AAAGAGGCCT	AATTCCTTTT	CTTTTAATT	TGAAGAAAAA	TCATCAGTCT	60
TGGAATACAG	AAGAGAACT	AGAAATATAC	GTATTTTGTT	TCACATTGTA	ACAGTCATTC	120
TTGAGGAATA	CTCCATACCT	GAGTAGACAG	CCATGTGGCC	ATCGCAGCTA	CTAATTTTCA	180
TGATGCTCTT	AGCTCCAATA	ATTCATGCTT	TCAGCCGTGC	CCCAATTCCA	ATGGCTGTGG	240
TCCGCAGAGA	GCTATCCTGT	GAGAGCTATC	CTATAGAGCT	TCGCTGTCCA	GGAACAGACG	300
TCATCATGAT	AGAAAGTGCC	AACTATGGCA	GGACTGATGA	CAAAATTTGT	GACTCTGACC	360
CTGCTCAGAT	GGAGAATATC	CGATGTTATC	TGCCAGATGC	CTATAAGATT	ATGTCTCAAA	420
GATGCAATAA	CAGAACCCAG	TGTGCAGTGG	TGGCAGGTCC	TGATGTTTTT	CCAGACCCGT	480
GTCCAGGAAC	CTATAAATAC	CTTGAAGTGC	AGTATGAATG	TGTCCTTAC	ATTTTCTTT	540
GTCTGGACT	ACTAAAAGGA	GTATACCAGA	GTGAACATTT	GTTTGAGTCC	GACCACCAAT	600
CTGGGGCGTG	GTGCAAAGAC	CCTCTGCAGG	CATCTGACAA	GATTATTAT	ATGCCCTGGA	660
CTCCCTACAG	AACTG					675

## (2) INFORMATION FOR SEQ ID NO:219:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC	AAAGAGGCCT	ACTCCCTGTT	TGAACAAGT	TTTTTGAGA	ATTCTTAGTT	60
TTAGTTTTTG	TTTAGCTTAC	ACACTGAAAA	TTTTGAGAAG	CATCTAAAAA	AATCCACAAT	120
TAGTGCAAAA	AGAGGGGACA	ATACTTAAAG	TCATTCTTTC	TATAAAAAGA	ATTAAGGTTA	180
CTAAATGCCA	ATTTTAAAGC	AAATATATAG	TTTCCTATTT	GCCTTCTGAA	AGACAGCAGA	240
TATAAAAATA	GTTCAATATT	AGGTTTAAAC	AGGTTTGAAC	AACACATGTA	CTATCAGCTT	300
TATTTTACCT	GCAAAAATAT	TTTAGCTACA	CTTGGAAAAA	AATAAACTTG	AGAATATAAC	360
TTACATTTTC	TAAGGCCAGA	TGCAAGAATA	CTTATTTAGG	CCTCTTTGGC	CGAA	414

## (2) INFORMATION FOR SEQ ID NO:220:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA	60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG	120

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT	60
TAATTGGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC	120
CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATTCATT	180
GTAGAAAGTC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGTCCTCTT	240
CCTGTTAGTG TTCTACAATT CCTTCTCCT TAATTTTCT CCGCTTTACA AAATGTCACA	300
CAGACAAGTG CATAATACTT AAACAAGCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA	60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTTCAAT TATTTACTTC	120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT	180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG	240
ATGTTTACTC TTCACTTTCA CGGCGGAATC ACCATCTGAG GATCCCACCC GATGGTTTAC	300
TTGTGTCTCG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT	360
TTCTGGGTAT TCTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA	420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA	480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA	540
GTTTCCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC	600
CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA	660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTCTT TGGGAGAAGA	720
ACTGGATATT GTTGCTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT	780
CCGCTGCCAG TTTTITACCT ATACCCCAAC GCTCGAG	817

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```
GAATTCGGCC AAAGAGGCCT AGGAGATACA TCATCATATC ACGGAAAGAG ATGCAGATAG      60
ATCTTTGACC ATACTTGATG AACAGTTATA CTCATTTGCG TTTCCACCG TGACATTAC      120
GAAGAAAAGA AATGGAGGTG GGAGTTTAAA TAACTATTCC TCCTCCATTC CATTGACTCC      180
CAGCACCAGC CAGGAGGACC TTTATTTTCA TGTTCCTCCC ACTGCCAACA CACCCACGCC      240
CGTTTGCAAG CAGTCCATGG GCTGGTCCAA CCTGTTTACA TCTGAGAAAG GGAGTGACCC      300
AGACAAAGGG AGGAAAGCCC TGGAGAGTCA CGCTGACACC ATCGGGAGCG GCAGAGCCAT      360
CCCCATTAAA CAGGGCATGC TCTTAAAGCG AAGTGGGAAA TGGCTGAAGA CGTGGAAAAA      420
GAAATATGTC ACCCTGTGTT CCAATGGCGT GCTCACCTAT TATTCAAGCT TAGGTGATTA      480
TATGAAGAAT ATTCATAAAA AAGAGATTGA CCTTCGGACA TCTACCATCA AAGTCCCAGG      540
AAAGTGGCCA TCCCTAGCCA CATCGGCTG CGACCCATC TCTCGAG      587
```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 534 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```
GAATTCGGCC AAAGAGCCTA AGTAGTTGCT GCCTTTCTTC AGATCAGGTT ACCACAATGC      60
CTCCCCGCTG CTGACGCTTC ATCCCCACA CCTCCAGCCC CAGTTACCTG GAGCTTCTCA      120
GAACCCACTT TGCCGGTGCT AAAACACAAG AGGGGGTGAA AGTGGCTGCC AGTAATGGCC      180
AGAAACCAAC CACCAGAGGC CAGGCTGAAA GACAAGCTCC GGGTGTCAG GGGCTGACGG      240
GCCAACCATG TGGCAGGTCC CAGGCCCCAC CCACTGCGCC ATCCGTCTCT GAGCTCCACA      300
GTGGTCCCAC TAATGGGAAC CTCCTTAGG GAGAGTGATA CTGCACCTTC ACCCGTAGGA      360
CTCATATTTA TAACAATGTG TAATGGCTGT AGCAAAAAGC CCTTGTTTCT AGATGTAAAT      420
GGTCAAAGAA ACAAGCGCTC TATTGTTTTG AATAAAATAG TTCAAATGAG TCCTGTATCA      480
TTGTATCTCC TATTCTGGAT TAGTGCCTTT TGGACAGTAG ACTGTAACCT CGAG      534
```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```
GCTCCACTCT CTCCCTATCC ATTTGTAAGA ACAGGCTCCC CTCGCCGAAT ACAGTTGTCT      60
CAAAATCATC CTGTCTACAT TTCCCCACAT AAAAATGAAA CAATGCTTTC TCCTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```

GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCCCTGC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCTCGCA ACTAGATCAT TCACGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTTCTG TACCTCCCAA CTCAATGCTT AGCAGCCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCGTGTGA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTTGT ACCATTCCCG GGTGGCTCG AG                          582

```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTC CCTGCGCTCA CTCAACATCA TAGTCTTTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATT TCCTGCTTTT TTTTCTTCTA CTATTGTTGC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCTAAAT ATCTGTTTCT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTTT GCACCAGAGA ATTAGAGATG      360
AACCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATTT AAATCTCAA ATCAAGATGT      420
TTCTACCAT TTCCATTACT ATTGTCCCA GCTTCTCGA G                          461

```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAGA GCAGAACCA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                          133

```

(2) INFORMATION FOR SEQ ID NO:229:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```
GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGGAATCTAC TGATACCAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAAA GGAAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGTCTATCA AGTAGTGCCT      240
CCAGAGAACC TTATAAGAAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTTCCTCTG ATGAGCAAGG GAACAACACT GAAAACTCTCG      480
AG                                                                                   482
```

(2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 501 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```
GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AAACCTGCGC      300
TTTATGTGAT TCCATTAGGT TCTTTTCATT TAAAGTAGTC TTAAATCAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTAGTCAGT AAAATGTTAG      420
AAATCAAACAT ATAAGAAAT TCAAGTCCTT TATTTTGTGT CTGGGTATA TGTCATTATT      480
TTAAATTCCA CAGCTCTCGA G                                                                                   501
```

(2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```
GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTTCG CTCACCATGT GGTCTGTGTC TCTTTCAGGT GGGAGTTTTG      120
GGGCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCTT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAAGACC CAGCGGCTTC      240
TTCATCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TGCGGAGTCC AACAGCATTA      300
```



GCAAGTGGGA TCAGAGCAAT CTCGAG

326

## (2) INFORMATION FOR SEQ ID NO:232:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAAT TCCGTCTTCA AGAAGAAACA	60
CCCGTGGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGGAAA	120
AACAAAGGCA AGAAGGGCTG CCATGTTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG	180
CGCCAGTGGC AATJCTTTGT TATCAGAGGA CGAAAATCCT GATGCGAATG GGGTAACTCG	240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACACTGACT TTTCTTCTTG TAGGACTCCT	300
AAATCATCAG TGGCTTAAAG AACAGATGT TCCTCAGAAA TCCAGACAAT TATATGCCAT	360
GCTCGAG	367

## (2) INFORMATION FOR SEQ ID NO:233:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

GAATTCGGCC TTCATGGCCT AAAGAAGAAT TGACACCTCT TGGAGTCCAC TTGGCACGAT	60
TACCCGTTGA GCCACATATT GGAAAAATGA TTCTTTTGG AGCACTGTTT TGCTGCTTAG	120
ACCCAGTACT CACTATTGCT GCTAGTCTCA GTTTCAAAGA TCCATTTGTC ATTCCACTGG	180
GAAAAGAAAA GATTGCAGAT GCAAGAAGAA AGGAATTGGC AAAGGATACT AGAAGTGATC	240
ACTTAACAGT TGTGAATGCG TTTGAGGGCT GGGGAAGAGG TAGGCGACGT GGTTCAGAT	300
ACGAAAAGGA CACTCGAG	320

## (2) INFORMATION FOR SEQ ID NO:234:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

GAATTCGGCT TCATGGCCTA CGATGAGGCT GCTGTCAATT GTGGTGTGG CTCTATTGCT	60
TGCTACTCAA GCAGAGGAAG GAGCCAGGCT TTTGGCTTCC AAATCACTGC TGAACAGATA	120
CGCCGTGGAG GGACGAGACC TGACCTTGCA GTACAACATC TACAATGTTG GCTCAAGTGC	180
TGCATTAGAC GTGGAATAT CTGATGATTC CTTCCCTCCA GAAGACTTTG GCATTGTGTC	240
TGGAATGCTC AATGTCAAAT GGGACCGGAT TGCCCTGCT AGCAATGTCT CCCACTGT	300
GGTCTCGCGC CCTCTCAAGG CTGGTTATTT CAACTTACC TCGGCAACAA TCCTCGAG	358

## (2) INFORMATION FOR SEQ ID NO:235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGTACGTA ATGTATTTAT ATGTTAATTT GTTATGTATA      60
TAGATGTGCA AGTCTTGTC GAATTGGCCT CAGTGTAGTT AAAGGGCAGA AGGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTCGC CTGTGGGAAG AGAAGGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAG CTTTCTGACA AGATAAAGGA AGTCACCAA ATTTCTTTT TTAATTTGTA      480
TCTAATCCTC AACAACAAAC CAAACTCTC GAG                                     513

```

## (2) INFORMATION FOR SEQ ID NO:236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGAAAT GTTGTATGCT ACTCTGAAAG ATCGAGAACT      60
GAGCTTTCAG TCGGCTCCAG GACTACCAT GTTCTGTCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTCTAC TTTGCCTCCT TCATTCTACT ACTGAGAGAG GACTTCGAC CTGGTGTCTT      180
GTGGTTTCTA AGGAATTGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTT      240
GCCAATATAT AGGCATCTCC GAAGATTTAT TTTGTCACTG ATTGTCTTTG GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAGAGT GTGCTGCCTA ATTTCTTCC      360
ATACAATGTC ATGCTCTACA GTGATGTCC AGTGAGTGAA CTGTCCCTCG AG               412

```

## (2) INFORMATION FOR SEQ ID NO:237:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAAC AACCAGCCAG TTAGTTTTCA AGAAATCTTT GAAGCCAAAA GACAAGAGTT      180
CTATGATCAA TGTCAGAGGG AAGAAGAAGA GTTGAAACAG AGATTTATGC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```

TAAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

## (2) INFORMATION FOR SEQ ID NO:238:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

```

GAATTCGCGC ATTCGGTACA ACAAGAGAGA TAAACGATGA AACCGTTACA TTATACAGCT    60
TCAGCACTGG CGCTCGGACT GCGCTTAATG GGAATGCAC AGGCAGTGAC GACCATTCCG    120
TTCTGGCATT CTATGGAAGG GGAAGTGGT AAAGAGGTGG ATTCTCTGGC CCAACGTTT    180
AACGCCGAAA ACCCGGATTA CAAAATTGTA CCGACCTATA AAGGCAACTA CGAACAGAAT    240
TTAAGCGCGG GGATTGCCGC ATTCGTACC GGCAACGCGC CGGCTATTTT GCAGGTTTAT    300
GAAGTTGGCA CCGCCACCAT GATGGCGTCG AAAGCCATTA AACCGGTGTA TGACGTGTTT    360
AAAGAGGCAG GGATTCAGTT CGATGAGTCG CAGTTTGTGC CGACGGTTTC AGGTTACTAC    420
TCCGACAGCA AAACGGGCCA CTTACTCTCC CAGCCATTCA ACAGCTCGAC CCCGTTCTC    480
TATTACAACA AAGACGCCTT CAAGAAAGCA GGATTAGACC CGGAACAGCC GCCGAAAACC    540
TGGCAGGATC TGGCGGACTA TGCCGCGAAA CTGAAAGCCT CCGGCATGAA GTGCGGCTAC    600
GCCAGCGGCT GGCGGGCTG GATCCAACGT GAAAACTTA GCGCCTGGAA CGGTCTGCCG    660
TTTGCCAGCA AAAACAACGG CTTTGACGGC ACGGACGCGG TGCTGGAGTT CAATAAGCCG    720
GAGCAGGTGA AACACATCGC CATGCTCGAG                                750

```

## (2) INFORMATION FOR SEQ ID NO:239:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGGAAGGAAG CCCTCATTAT    60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTCAG AAGAGGATTA    120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG    180
CTGTGATGGG ACATTCTGTG TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA    240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAAT GTCGGGAATT ATCAACCATG AAGCATACCA    300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG    360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC    420
CTTTGGCTGC AACAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT    480
CAACCTCGAG                                490

```

## (2) INFORMATION FOR SEQ ID NO:240:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

GAATTCGGCC	TTCATGGCCT	ACTTCTGGAC	TCTATAGAAC	CCACTGCCTC	CTGATGAAGT	60
CCCTACTGTT	CACCCTTGCA	GTTTTTATGC	TCCTGGCCCA	ATTGGTCTCA	GGTAATTGGT	120
ATGTGAAAAA	GTGTCTAAAC	GACGTTGGAA	TTTGCAAGAA	GAAGTGCAAA	CCTGAAGAGA	180
TGCATGTAAA	GAATGGTTGG	GCAATGTGCG	GCAAACAAAG	GGACTGCTGT	GTTCCAGCTG	240
ACAGACGTGC	TAATTATCCT	GTTTTCTGTG	TCCAGACAAA	GACTACAAGA	ATTTCAACAG	300
TAACAGCAAC	AACAGCAACA	ACAACTTTGA	TGATGACTAC	TGCTTCGATG	TCTTCGATGG	360
CTCCTACCCG	TTTCTCCAC	TGGTTGAACA	TTCCAGCCTC	TGTCTCCTGC	TCTAGGATCC	420
TCGAG						425

## (2) INFORMATION FOR SEQ ID NO:241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

GAATTCGGCC	TTCATGGCCT	AACCAGAACT	AATTTGCTAA	GTCTTTTGTT	TAGTCCTGCA	60
AGACTGATGC	TTAATACACA	GTCTGTCTCT	CTGTGTCTAG	GTCAGGAACT	CCAGTTTGCT	120
TTTCTGTTTT	GTGTCCTGGT	AGCAGCTGTT	GAGTAACTTT	CATTGGAGGT	TGGGAAGGAA	180
GTGAGGAGAA	AGTGTCTCTG	TTTAGTGTTC	TATTTCTTAT	AATAGGATGC	TGCTTAACCC	240
AGTTTCATCTC	TATGTCCTGT	TCACTGAATA	TTCCGGGTAA	TTGAAAGAAA	ATATAATGGA	300
TGGGCTCCAT	TAAAACCAGC	TCAAAAATAA	ATTCTTGTC	GTAAAGATTT	CTTGTCGAAGA	360
TGTCTTGAT	TGCACTTTG	TTGAGGAAAG	ACAGTGTAAG	TAGTTAAAGA	ATGTTGATAA	420
AATTGAAACA	TTGGTTGTG	GAATTGTGTG	TGGTACTCGA	G		461

## (2) INFORMATION FOR SEQ ID NO:242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

GAATTCGGCC	TTCATGGCTT	ATGGACAAGG	AAGCATTGAG	AGCATGGTGT	CATCTGACTC	60
CACATCACCA	GATTCTTCTT	TAACAGAAGA	ATCACGTTCT	GAGACAGCCA	GTAAGTTTATC	120
CCAGAAGATT	TGTAATGGGG	GATTATCTCC	TGGTAACCCA	GGAGATTCTA	AGGACATGAA	180
GGAAATTGAG	CCCAATTATG	AAAGTCCCTC	TAGTAATAAT	CAGGATAAAG	ATTTCATACA	240
GGCTTCCAAA	AGCTCAATAA	AAGTTCCAGA	GACCCACAAA	GCAGTCCTTG	CTCTCCGATT	300
AGAAGAGAAA	GATGGCAAGA	TTGCTGTACA	AACTGAGAAG	GAAGAAAGTA	AAGCCTCTAC	360
AGATGTTGCT	GGGCAAGCAG	TAACCATAAA	CCTTGTCCCC	ACAGAAGAGC	AAGCAAAACC	420
TTACCGAGTT	GTGAACCTGG	AACAGCCATT	GTGCAAGCCA	TATACTGTCTG	TGGATGTGTC	480
AGCAGCCATG	GCCAGTGAGC	ACCTCGAG				508

## (2) INFORMATION FOR SEQ ID NO:243:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCT TCATGGCCTA GGTTTCTGT ACATGGAGAT TAAACTGTCT TCCAAAGTGA      60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC      120
AAGGAAGAA AATCATTTC TCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG      180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT      240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCTGGCG      300
ACCTGACGCT GCGGAGGCTC GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:244:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 396 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTCC TCATTCTCT ACACCGTCAA TTACATCTGG      120
TATTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATACTGTGCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAACTTC      300
AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA      360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG                                         396
```

(2) INFORMATION FOR SEQ ID NO:245:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 370 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```
GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTTTGTA TTTTCTTTTC      60
TGTCCTCAAC AGTTTCCCC AAAAAAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC      120
CTTCCAGTCA GCAGCTGTG ATTGGGCTTT TCCCCTCAGA AACGAACAAT CCAGAACCCA      180
CTGTTTAAAA CAACTGTATT TTGCCTGGG AAGTCCCATT GCCTTCCCTG AAAACATTAA      240
ACATTCTCTC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCCATCCT GCTCCACAGC      300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCCC TTTCCACCC GCGGCCCTGC      360
CTCCCTCGAG                                         370
```

(2) INFORMATION FOR SEQ ID NO:246:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 367 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC	TTCATGCCTA	GAGAACTTGA	AGCTTTGCGG	CAGGAATTTA	AAAAGAAAGA	60
CAAGACGTTG	AAAGAGAATT	CCAGAAAGTT	GGAGGAAGAA	AATGAGAATC	TCCGAGCAGA	120
GCTACAGTGT	TGTTCTACAC	AACTGGAATC	CTCTCTCAAC	AAATACAACA	CCAGCCAGCA	180
AGTCATCCAA	GACTTGAATA	AAGAGATAGC	CCTTCAGAAG	GAGTCCTTAA	TGAGCCTGCA	240
GGCCAGCTG	GACAAAGCTC	TGCAGAAGGA	GAAGCACTAT	CTCCAGACTA	CCATCACCAA	300
AGAAGCCTAT	GATGCATTAT	CCCGGAAGTC	AGCCGCCTGC	CAGGATGACC	TGACACAAGC	360
CCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCC	TTCATGGCCT	ACGGCTTCAT	AGTAACTCTT	TGCCATATCT	CTAGCCAGCT	60
GCATAAACG	TTCCGCATCA	GATGGAGACA	AAAGGTTTAA	AATACGCCTA	TAACCATCCA	120
TGGCCATTTT	ATGATCACCC	ATCTGTTTCT	AAAGGCTTGA	TCGCTCCAC	AGATAACGGA	180
CATTAGTAGG	TTCATATTTA	AGAGCTTTTG	TATAGCAAAA	AATAGCCTGC	TTAATATTGT	240
CTTGTTCCAG	AGACATTTCT	GCCAGTCTAA	CCCATTCTTC	TGTGTCACTG	GGATTTAAAT	300
GCGCAGCAAT	CAACTCAAAC	TGCAATGATT	TTTCCATGTC	ACCTTGGTCC	TCATATATCA	360
TGGCTAGAGT	AGAGAATGGC	TCATAAGCCA	GAGGAGCTTG	TCTTATGATT	TCCATGCACA	420
TCAATATCGC	CTCTTCACGT	TCTCCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC	TTCATGGCCT	AACGAACTG	ACGTCTACCT	CATGGGGCTG	CTGTGTGGGT	60
TTGGGAGGCA	AAAATCTATG	AAGGGTTTTT	TGAAATCCCA	TAGGTGCCAC	ATCTATGAGA	120
TGTTTGATAA	ATGTGAATAT	GCTTTTACAT	TTGGGCTTAT	CTAATTGCA	ATAAGAGAGC	180
CTCTCTCTAT	CAACACCAGC	TTCTCTCTCG	GGCTGTTTGC	TCAGGGAAGG	CAAGAAAGCC	240
ACGTGCTGGC	CCTCTGCCTT	CTCTAAAGTG	CTGTTGGAGC	ATGGAGGAGC	TGGAGGAGAT	300
GGGGATGGAC	TGACAGCTAA	GAGGGCGGCT	GCTGGGACTA	GATAGTGGAT	GAAGAAAGAA	360
GGACAGGAA	GCCGTGGGGC	AGCCTCTTCA	CATGGGGACG	AACTCGAG		408

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCATGACA GAGAGCAGTG CCAAAGACAT GGCCTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTT GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAGTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGTGCC CGGCACGAGG AGGTCATTCA GCGTCAGAAA AAGGCCTTAT CTGAACCTCG      540
AGCGCGAATT AAAGAACTCG AG                                         562

```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCACAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCAGGTGCG GTCCGGCCGC GGCTTCCTGT TCAGAGTCCT      180
CCGAGCAGCT CTTCCCCTTC AGCTTCTCCT GCTCCTCCTC ATCGGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCG GGTCAATCCA      300
CCCTATGCTC GAG                                         313

```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAACTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTGTGT      60
TTTTTTGTTT TGTTTGGTTT TTTTTTTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCCG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGGCGCC      180
CATTTCCGCC ACTCCGATT CGGGGATCTG AACCCTGACTC CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GGCGCTCGCC CAACTCTCGA G                                         291

```

(2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 384 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG      60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAG AGTTTGTTAT TAACCCCAAC      120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT      180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCTC GGTGACCATT      240
GATGGTGTGA CTTACGGATC TGGAACTGCA AGCAGCAAAA AACTTGCGAA GAATAAAGCT      300
GCCCAGAGTA CACTGGAAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG      360
CCCAAAGACA GTGAAGAACT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GGGACGTTGG TGTTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA      60
GTTTGGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCGAAA TCATATGGCT      120
GTAGCATTTC TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA      180
AGAAAGAAGG CATACGAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG      240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 497 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

GAGTTTGTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG      60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC      120
TCGGTGGGGT TGACATTGGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT      180
GGGAAACCGC CCCCCGGGC CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT      240
GTAAATTC ATCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT      300
TAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT      360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC      420
CGACAATCTT CTATTTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT      480
TCTAGACCTG CCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:255:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```

GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTTCAGGCT      60
CCGTTGGTGG TCGGCATGGC CCGTGGAAT CAACGAGAAC TTGCCC GCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTGTAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470

```

## (2) INFORMATION FOR SEQ ID NO:256:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```

GAATTCGGCC TTCATGGCCT AATTTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAATC CCAACCTCGG GTGATCCGCC CGCCTTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTTC TTCTCTTTCA GTCTGTTGTG      240
GTGGTTTGTA GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG      388

```

## (2) INFORMATION FOR SEQ ID NO:257:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```

GAAACAGGGC TCAAAGAAGT GGTAAC TGCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG      333

```

## (2) INFORMATION FOR SEQ ID NO:258:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC      120
GGACGGCGGT AATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGGAACA AATTCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG      240
AAAACCCCTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG                                         544

```

(2) INFORMATION FOR SEQ ID NO:259:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 393 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCGCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GCCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTTCGTT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAAGTA CGAGAGTGTG      300
GGCTGACAAT AAACCTCTTT ATTCTACCCT CTCTGTCTCT CATAAGGAGA AATTTAAATT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC                                         393

```

(2) INFORMATION FOR SEQ ID NO:260:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 705 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCCTTTA AAAAAAACC AATACCAAAG      60
AAGCCTACAA TGTTGGCCTT AGCCAAAATT CTGTTGATTT CAACGTGTTT TTATTCACCT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCAC CTCAAATCTC AAGGCGAGTC ATTCCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```

GGCAGTCTAA AACCCACATC TACCATTTC	ACAAGCCCTC CCTTGATCCA TAGCTTTGTT	420
TCTAAAGTGC CTTGGAATGC ACCTATAGCA	GATGAAGATC TTTTGCCCAT CTCAGCACAT	480
CCCAATGCTA CACCTGCTCT GTCTTCAGAA	AACTTCACCT GGTCTTTGGT CAATGACACC	540
GTGAAAACCTC GTGATAACAG TTCCATTACA	GTTAGCATCC TCTCTTCAGA ACCAACTTCT	600
CCATCTGTGA CCCCTTGAT AGTGGAACCA	AGTGGATGGC TTACCACAAA CAGTGATAGC	660
TTCACTGGGT TTACCCCTTA TCAAGAAAAA	ACAACTCTAC CTACC	705

## (2) INFORMATION FOR SEQ ID NO:261:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

GAATTCGGCC AAAGAGGCCT ACCTTACTTG	AGTCCACAGG CAAGGCCCAA TAATGCATAT	60
ACTGCCATGT CAGATTCCCTA CTTACCCAGT	TACTACAGTC CCTCCATTGG CTTCTCCTAT	120
TCTTTGGGTG AAGCTGCTTG GTCTACGGGG	GGTGACACAG CCATGCCCTA CTTAACTTCT	180
TATGGACAGC TGAGCAACGG AGAGCCCCAC	TTCCTACCAG ATGCAATGTT TGGGCAACCA	240
GGAGCCCTAG GTAGCACTCC ATTTCTTGGT	CAGCATGGTT TTAATTTCTT TCCCAGTGGG	300
ATTGACTTCT CAGCATGGGG AAATAACAGT	TCTCAGGGAC AGTCTACTCA GAGCTCTGGA	360
TATAGTAGCA ATTATGCTTA TGCACCTAGC	TCCTTAGGTG GAGCCATGAT TGATGGACAG	420
TCAGCTTTTG CCAATGAGAC CCTCAATAAG	GCTCCTGGCA TGAATACTAT AGACCAAGGG	480
ATGGCAGCAC TGAAGTTGGG TAGCACAGAA	GTTGCAAGCA ATGTTCCTAA AGTTGTAGGT	540
TCTGCTGTTG GTAGCGGGTC CATTACTAGT	AACATCGTGG CTTCCAATAG TTTGCCCTCA	600
GCCACCATTG CTCCTCCAAA ACCAGCATCT	TGGGCTGATA TTGCTAGCAA GCCTGCAAAA	660
CAGCAACCTA AACTGAAGAC CAAGAATGGC	ATTGCAGGGT CAAGTCTTCC GCCACCCCCA	720
ACACTCGAG		729

## (2) INFORMATION FOR SEQ ID NO:262:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

GAATTCGGCC AAAGAGGCCT ACTACCATGT	CCTCTTGGAG CAGACAGCGA CCAAAAAGCC	60
CAGGGGGCAT TCAACCCCAT GTTCTAGAA	CTCTGTTCTT GCTGCTGCTG TTGGCAGCCT	120
CAGCCTGGGG GGTCAACCTG AGCCCCAAG	ACTGCCAGGT GTTCCGCTCA GACCATGGCA	180
GCTCCATCTC CTGTCAACCA CCTGCCGAAA	TCCCCGGCTA CCTGCCAGCC GACACCGTGC	240
ACCTGGCCGT GGAATCTTC AACCTGACCC	ACCTGCCAGC CAACCTCCTC CAGGGCGCCT	300
CTAAGCTCCA AGAATTGCAC CTCTCCAGCA	ATGGGCTGGA AAGCCTCTCG CCCGAATTCC	360
TGCGGCCAGT GCCGCAGCTG AGGGTGCTGG	ATCTAACCCG AAACGCCCTG ACCGGGCTGC	420
CCTCGGGCCT CTTCAGGCC TCAGCCACCC	TGGACACCCT GGTATTGAAA GAAAACCAGC	480
TGGAGTCTCT GGAGGTCTCG TGGCTACACG	GCCTGAAAGC TCTGGGGCAT CTGGACCTGT	540
CTGGGAACCG CCTCCGGAAA CTGCCCCCGG	GGCTGCTGGC CAACTTCACC CTCCTGCGCA	600
CCCTTGACCT TGGGGAGAAC CAGTTGGAGA	CCTTGCCACC TGACCTCTCG AGGGGTCCGC	660
TGCAATTAGA ACGGCACATT CTCGAG		686

## (2) INFORMATION FOR SEQ ID NO:263:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCCCAGT GGCACGTTT AACAGGTCAG      240
CCAACTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC      360
ATTCCCCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCCT ACCTACGTGG AACCCACAAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571
```

(2) INFORMATION FOR SEQ ID NO:264:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTTCATCT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTTC CCTGAAACTG CTAGCACAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCCTCC ACAATTCCTA CACCTGCTCC      300
CCCCATACTC GAG                                     313
```

(2) INFORMATION FOR SEQ ID NO:265:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 343 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCACGTC AACCTTGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGACT GGCTGTGTC CAGAAACAGG GAGTAAATG GGAAGTAAAC      180
TCAGTCCCAC GTCTGCCTGA CTCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCT TTTGTGCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343
```

## (2) INFORMATION FOR SEQ ID NO:266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCAATTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATG7GATCT CTAAGCTGGA AAGACTCGAG      340

```

## (2) INFORMATION FOR SEQ ID NO:267:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTTGGCTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCC CGGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTT7AG GGA7CTGGGTA CTCTCTTAGA      240
GAAGAACTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTCT C7CCGTC7CAG AATTCTGTGG      360
ACTCGAG      367

```

## (2) INFORMATION FOR SEQ ID NO:268:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTC TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA      180
GTTTCGTA7CT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG      320

```

## (2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 542 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCATTCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG      180
AACCCTGACC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTTG GACCATTACG      420
GAGTTCACAG CCCAGTCTCC AACTGACCTC CCTCCTGCTC CAGCTGCCCA TGCTAACAAG      480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCC      540
GT                                                                    542
```

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 613 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```
GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATTG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCTTTG      120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTCTT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAAATGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTCATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG                                                                    613
```

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 763 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```
GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTATTCTCT TCTGTGGCTG GAACCTTCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120
```

```

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTA ATCACAAGTC CTGGAAATGG      180
TCTAATGACC GTGAATTGA TAAACTCGGC AGAGTCTAAG ATCCTTCTCA TGGAGCTGAT      240
TTCCAGGTAG CTGGGGGCTT TGAAAGGACA CCCCCGGGGG CATGCCATCA ACTACCACAC      300
AGCCAGGGTT AATTGTGATT TCCCTGTAGG GAACTTTCAC AGGAAAACCC ATACCAATAG      360
CTTCACCAAA TTTCCGACTA AAGAGGTCAT TCACTTGTTT TCTTAGCTGT CTAGCTTTTT      420
CAACTTTCGA GAGTCTTTCA TTATCATCAT CTGGAATTGT CACCTGAATG ATGTTAAGGT      480
CTTCAACACC TGATGCAGTA GTATTAACAT TGGGTGATGA ATTTATTTT CTGGGAGGGC      540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTCGGGCTTT TTAATGATGA      600
ACTTAATTTT GGCTTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG      660
GTCTTCGAA TGGCACACCC TCAGGTAAGC CTTCCACATA AAAGTCTTCC GGGAAAGACT      720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG                          763

```

## (2) INFORMATION FOR SEQ ID NO:272:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG      60
TATTTCTTA ATAAGAATAA AATGAATTA AACTGATTC TG                          102

```

## (2) INFORMATION FOR SEQ ID NO:273:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCA AGTNGCAAGA AGGAANTGTC      60
TAAAGAGAT GGCAAGGAGA AAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG      120
TGAAGGGAAG GCCCCTGCAG AANACGTCTT TAAGAAGCCC CTGCCTCCTA CTGTGAAGAA      180
GGAAGAGAGT CCCCCTCCAC CTAAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA      240
TGGAGGAGAC AGTGAATATG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCCACAGCC      300
CCGCACAGCA CAGCCCCAGA AGCGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA      360
ACTCACTGAC TGGAATAAAC TGGCTTGCT GCTTTGCAGA AGGCAGTTTC CCAATAAAGA      420
AGTTCTGATC AACACCAGC AGCTGTCAGA CCTGCACAAG CAAACCTGG AAATCCACCG      480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA      540
GTTTAAAGGA ATAGGAAATC TCGAG                          565

```

## (2) INFORMATION FOR SEQ ID NO:274:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT	60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTC TACTTTTCAA AGGTGTGTAG	120
AAGTTTGTGA AATAAATTTT CTGATAGGAT AAAGTAGATT CCCTATGATC TCTTATTAT	180
TTATCATT	188

## (2) INFORMATION FOR SEQ ID NO:275:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTGAGCA CGAGCTCCTC	60
TAGGCGGTGC AGGTCGCAGG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA	120
CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTCGTC	180
GGTGACCTTG GAGCAGCCCG AGAGGTGAA CGCGGTGAGG TTGGGCAGGN TGTGCACCAC	240
GTTGACCACG CCGTGGTTGG TGATCTCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT	300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC CTCACGTGGT AGGCCTGCAG	360
GCTCAGCTCC GCCAGGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC	420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC	480
GGCCTCGGTG AAGTCGTTGC AGCCCAGACG CTCCAGACGC ACCACGCCCT GCATCTGTTC	540
AAGCATAACC TCGAG	555

## (2) INFORMATION FOR SEQ ID NO:276:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT	60
GGACACAATC TTCTTGTGGA GTCTTCTATT GCTGTTTTT GGAAGTCAAG CCTCAAGATG	120
CTCAGCTCAA AAAAATACCG AATTGTCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA	180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAAC	240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TTAAAACAAC AGGAAACCTC	300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCT GCCATCTCAG AGAAAAACA	360
AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA	420
ACAGTATCTC CATGGCAACA AGGAATTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA	480
AGATACAAGG CTCGAG	496

## (2) INFORMATION FOR SEQ ID NO:277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACACCCAGAG ACTGTAATTT GTGTAGTTT TCTTTTAA      60
CTTAAAGACA ACTTTAAAAA ATACTTACAT TAATGTTTTT TATATTCATA GGTGGGTATA      120
TTCGCCTCAT TCAAATGGCA GTAGCCTTGG CTCACATAAG ACATGTTTCA TGTGATCTGT      180
ATCCTGGCAT ACCAGTTATA TTTGTGGGG ACTTTAATAG TACACCATCA ACAGGAATGT      240
ATCATTTTGT CATCAATGGC AGCATTCCAG AGGATCATGA AGACTGGGCT TCCAATGGGG      300
AGGAGGAAAG ATGCAATATG TCTCTTACAC ATTTCTTCAA GCTGAAAAGT GCTTGTGGTG      360
AACCTGCTTA CACAAATTAT GTTGGTGGCT TTCATGGATG TCTAGATTAC ATTTTCATTG      420
ACTTAAATGC TTTAGAGGTG GAACAGGTGA TTCCATTACC TAGTCATGAA GAAGTTACCA      480
CTCCACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAACA GATAAAAATA AGCCTGTGGA ATGACCACTT      60
TGTGGAATAC GGCAGAACCG TGTGTATGTT TCGCACAGAG AAGATTCGGA AGCTCGTAGC      120
CATGGGCATC CCTGAATCTT TCGAGGGGAG ACTCTGGCTT CTCTTCTCAG ATGCGGTGAC      180
GGATCTTGCC TCACACCCTG GTTACTACGG GAATCTGGTG GAGGAGTCCC TGGGGAAATG      240
CTGCCTGGTA ACCGAGGAGA TAGAACGAGA CCTGCACCGC TCCCTGCCAG AGCACCCCGC      300
CTTCCAGAAC GAAACGGGAA TTGCTGCTTT GAGGAGAGTC TTGACGGCCT ATGCCACCG      360
GAGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```

GAATTCGGCC AAAGAGGCCT ACTCTCCCTT TCCACTCCCT GGTGTTCCCA GGAGTGAGAT      60
GAGGGTGGAG GGGCCAGCA CAGCACCTTC AACCTCAGGA TGAGAGAGGC CCTTTCACAA      120
AACTCTAAGG CAGGGGAACA GGAAACAGAG AAAGCCGGAG AACCCAGGA GGGCCCAAG      180
AGCGGATTCT GGTGATTATT AATGTGCTTG CCCAATGAAG AAAGAATACT GGCACTCTCT      240
AGGTATGATG AGAGCAGACA GCAAACGTGG GGCCTGTCTA CAGTGATTCTG CTACCCCAAT      300
GTATGGTCAT CCACGTTAGA AGCAGCAGTG AAAGGCGTGT TGCTTTTCAT TATTAAC TTC      360
AAATCCAGT CCCTAAACCA GCTCTTGACG CCCCTCTGTC AGGTGCTAAT CCTGGAAACT      420
GGAGGCCACC TGGTCTCCAC TTTAGGTGAG GAAAACCTGG GAGAAGCCAT CAGACTGCAC      480
CTGTGGCATG AGATGCTTTG AGACAGGTCA AGAGGAGGAG CTCTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT ACAGTGTCTG AGTAGATTTG AACTGAGG TGAAGGTAGG      60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAACCTAG      120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCCT AATCTTTTCT GTCCTTTTCT      180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCCGCTGA      240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGACCTG AGCGTACACC      300
CCAGCAGTGG CATCCAACCTC GAG                                     323
```

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTA      60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTTGTAGGA GGTTTGTATG GGGCCAGGGT      120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTTACA TATGACACCT GGGTGTGTTT      180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC      240
TTTTGCCGCT AATTCTGAAC TTTCCACTCC TTCCTTTTGA GCTGTGATTG GAGGGACATG      300
GCTCCAGCAT GCCAATGTAA ACCACGCCCC CCTCGAG                                     337
```

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```
GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTTT ATACTTTCAG GTCTGGATGC      60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCCAGCCTT      120
ATGATCTAAA AATAATGGAA AATTACCGG TATCGTTAGA GCTACACCAA AATTGCATTG      180
AGCCAAAACCT CGAG                                     194
```

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```
GAATTCGGCC AAAGAGGCCT AAAATCATCA TATTCATAGA GATATTAAAA GTGCAAATAT    60
CTTACTGGAT GAAGCTTTTA CTGCTAAAAT ATCTGACTTT GGCCTTGCCAC GGGCTTCTGA    120
GAAGTTTTGC CCAGACAGTC ATGACTAGCA GAATTGTGGG AACAAACAGCT TATATGGCAC    180
CAGAAGCTTT GCGTGGAGAA ATAACACCCA AATCTGATAT TTACAGCTTT GGTGTGGTTT    240
TACTAGAAAT AATAACTGGA CTTCCAGCTG TGGATGAACA CCGTGAACCA CTCGAG      296
```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```
GAATTCGGCC AAAGAGGCCT AGCAACATCC ACGCAGCTGC TCATCAGGTA CGAGTGCTTC    60
CATATCCATT TACCCACCAT TGGCAATTG AAAGGACCAT CCAGACCCCC ATAGGATCCA    120
CATGGAACAC CCAGAGGGCT TTCCAAAAGC TGACTIONCC CAAGGTCGTC ACCAAGCCAG    180
GCCATATCAT TAACCCATA AAAGCAGAAG ACGTGGGCTA CCGGTCTTCC TCAAGGTCGG    240
ACCTGTCTGT CATACAGAGG AATCCAAAAC GAATCACCAC ACGTCACAAA AAACAGCTGA    300
AGAAATGCTC TGTAGATTGA GTTGCTGGAG GAGTGACAGC CAGGAGCCCT GACTTCACCT    360
CCTTTGGTCC AGTTTACTC TGATACAGGG TGGATTCCAA AACTGGCTCA GTACATTGCA    420
TGTAAGTTAAG CCACATTTTA AAAATAAAGG CTCGAG      456
```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```
GAATTCGGCC AAAGAGGCCT AAGGTCGGCC TGTTCATCTT GATTAGCATC CAGGCCTTGG    60
AATATTTTCA CATGACAGC TTTATCTTTG ATATTCTTGA TGGTGTTCGC AAGCTCCTTT    120
GTAAGCAGCT GCTTCAGCTC ACCCCTCGAG      150
```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACTTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60  
TCTGAGCATA TTAGCTCTTC TGGGAAAAG TACTACTACA ATTGTGCAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 278 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60  
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120  
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180  
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTGACCGA GAAGGAGAAG 240  
AATTAGAATA TGAATTTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 364 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTTCTGA GGCCAACTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60  
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120  
CATCCAGTAT AACATGTTTT TCATTTTTAC TTTCTTGGCG TCAATTTTTT TAATGATCTA 180  
TTTAAAATTT TTTCAAAATG ACAACTACTA TGGAATACTG AATACAAAGT TCAGTAACAC 240  
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300  
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360  
CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60  
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120  
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCATTTCG GCCCAAGGAG 180  
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240  
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTGGGGT CTCTGGTCAG 300  
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420  
GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCCA CAGAGCTCGA G 471

## (2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 281 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60  
GACAAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTATAT 120  
TAAGCATCTC ACTGTTCTT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180  
AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240  
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

## (2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 250 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTCTA ATTGAGAGGT TAAATTAAT CTAGCCCACT 60  
TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120  
GTTGATACAA AGAAGTGTTC GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180  
TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCCAT ATCTCCAGGT 240  
GATCCTCGAG 250

## (2) INFORMATION FOR SEQ ID NO:292:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAACTGAAG 60  
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120  
TCCCCTACCA TCGCGTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180  
TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATTCTTGGA 240  
ATCCCAGAAC AGGCCCAACT CGAG 264

## (2) INFORMATION FOR SEQ ID NO:293:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 416 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```
GAATTCGGCC CTTTCATGGCC TAGGTTTCTC CGTGTTGGTC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAAATAAC TTTTAATAGG CTCTTTTTCT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATTT TCTTCTTCTC AATCTGGTCT TTGTTAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTACTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGTCTTCA AAATGTACCT TATATTTGAA CATTTGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416
```

(2) INFORMATION FOR SEQ ID NO:294:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 458 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```
GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAAGAGA GTCTCGAG      458
```

(2) INFORMATION FOR SEQ ID NO:295:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 302 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```
GTGTAAAACC AATGCCAGGA AAACCAAATA CACAAAACCC TCCACGGAGA GGTCTCTCTGA      60
GCCAGAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGGAGCC ACCCGTGAGA CCTCTCTCTG CTA CTCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302
```

(2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```
CATGGATCTG CTCCTGAGA GGGATGGAGA GAAGGGGAGG AGCACAAAGC CTGGCTTTGC      60
CATGCCAAAA CTTGCACTTC CCAAAATGAA GGCTTCTAAG AGTGGGGTCA GCCTGCCACA      120
GAGAGACGTG GATCCTTCCC TTTCTAGTGC CACAGCAGGG GGTAGCTTTC AAGACACAGA      180
AAAGGCCAGC AGTGACGGTG GTAGGGGAGG ACTTGGTGCA ACAGCAAGTG CCACAGGAAG      240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAACC      300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT      360
TCCCAAACAT GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG              412
```

(2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```
GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGGTT CCGCGTGGCA      60
CTGCCTGCGT ACCCAGCGTC GCTCACCGAC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC      120
AACGACTCAG GTATCTATCG CTGTGAGGTC CAGCACGGCA TCGATGACAG CAGCGACGCT      180
GTGGAGGTCA AGGTCAAAGG GGTCTCTTTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT      240
TTCTCCTTTT CTGGGGCCCA GGAGGCCTGT GCCCGCATTG GAGCCACAT CGCCACCCCA      300
ATCTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```
GAATAAGTAA ATTCATGGAA AGGAAGAAAT TAAAAGAAAG TGAGGAAAAG GAAGTGCTTC      60
TGAAAACAAA CCTTCTGGA CGGCAGAGCC CAAGTTTCAA GCTTTCCTG TCCAGTGGA      120
CGAAGACTAA CCTCACCAGC CAGTCATCTA CAACAAATCT GCCTGGTTCT CCGGGATCAC      180
CTGGATCCCC AGGATCTCCA GGCTCTCCTG GATCCGTACC TAAAAATACA TCTCAGACGG      240
CAGCTATTAC TACAAAGGGA GGTCTCGAG                                     269
```

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 458 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAGCGACCTT	TGGAATAGTT	AAGCACAGGT	CATTGTGGAC	ATGAATTCAG	GCCTCTGTAC	60
TAAAATCTAT	TTCAGGGAAT	GTTCTGTCTA	GTGATTGCT	CACCATTGGA	TATATAATGA	120
ATTATAGGAC	AAGTATAAGC	TGATCTGCTA	TAGCTGTCCA	TCAGAGAGAA	TACACGTGGC	180
TATAACATCT	ATAACAAAAC	GACGATTCCT	CTACAAGAGG	CTGTTTCTCA	CTGCTAACGT	240
TGGTGTTTCT	GGCGTGGGAA	GAAATGCACA	GGCGTGCATG	GCATGCACGT	TCAGACAGCT	300
GCATTGTAAG	AGTTCTGTCA	TGCAGTCTGA	AAAGGGAAGA	AACAGGATGG	CTTTCTGTAG	360
CCACACCTGT	GAGGCGTGAT	GATTGTTGTA	TTATTAGATT	ACTGATTTT	CTTTCTGAA	420
AATACATTG	AGTTTTAATC	ACATCTGTGG	AACTCGAG			458

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 99 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATGCCTG	TTCTTGGGGT	AGAGAAGTCA	GGTAGCCCAG	GGCCCGCACT	CTCAATAGAC	60
CTTCAGAGAA	AAGGCATCGA	GGTAAATGCC	GCACTCGAG			99

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 569 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GGTCTAACAG	TAACACTACT	CAAGAGACCC	TGGAAATAAT	GAAAGAATCA	GAAAAAAAC	60
TGGTGGAAGA	ATCTGTAAAC	AAAAACAAGT	TTATATCTAA	GACTCCAAGT	AAGGAAGAAA	120
TTGAGAAAGA	ATGTGAAGAT	ACCAGTTTGC	GTCAAGGAGAC	ACAGAGGCGG	ACATCTAACC	180
ATGGTCATGC	CAGGAAAAGA	GCCAAGTCTA	ATTCCAAGCT	AAAGTTGGTG	CGTAGCCTGG	240
CAGTGTGTGA	GGAGTCCTCC	ACCCCATTTG	CTGATGGGCC	ATTAGAAACC	CAGGATATAA	300
TTCAATTGCA	CATCAGTTGC	CCTTCTGACA	AGGAGGAAGA	AAAGTCCACA	AAAGATGTCT	360
CTGAAAAGGA	AGACAAGGAC	AAAAACAAAG	AAAAGATCCC	AAGGAAGATG	CTGTCCAGAG	420
ACTCCAGCCA	GGAATATACG	GACTCCACTG	GAATAGACCT	ACATGAATTT	CTTGTAATAA	480
CACTGAAAAA	GAACCCAAGG	GACAGAATGA	TGCTGCTAAA	ATTAGAACAG	GAGATTCTGG	540
AATTTATTAA	TGACAACAAC	CCACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 311 base pairs



- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC	60
AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG	120
GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTCAC ACTGAAGTCA CACCCATTGG	180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA	240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCCT GCCCAGAAAA ATCAATACGG	300
GGGCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 683 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG	60
GGAAGAATGC ACCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG	120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA	180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG	240
TATCCCGGGC CACAACCTCG CAGCTGACTG ATGTCTCCGA GGATTTGGAC CAGCAGAGCC	300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT	360
GGCCCCCTCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT	420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGC GGCTC TCATCCCCC	480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT	540
CCCTTGGAGG ACCAGTGGAG AACTGAGCC CCGAGACAGT GAGTGGTGGC CTCACTGCTC	600
TGCCCCGGCAC CTTGTCACCT CCACTTTGCC TTGTTGGAAG TGACCCAGCC CCCTCCCCTT	660
CCATTCTCCC ACCTGATCTC GAG	683

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT	60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA	120
ATAGGCAAAA CCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC	180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT	240
TAGCCATGAT CATGCCACTG CACCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAAA	300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG	360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT	420

TTAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTATA	480
TCTCCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAAACTATA TTAAATTAAA	540
CTTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCCT AATACATTGT TTTCTACTTT	600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG	653

## (2) INFORMATION FOR SEQ ID NO:305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA	60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT	120
GGCAGAGTTA GGTGAGAGGC ACACCTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT	180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTTA TTGTGCTTAT CTGGGAGGGA	240
GAGTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC	300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT	360
GTTTACTGG GGGCCATTGT ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC	420
TCACCTCCCT CCGGCGCTCG AG	442

## (2) INFORMATION FOR SEQ ID NO:306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTT	60
ATGCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA	120
TTTTTAAGAT TTTTATCTTG CTTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT	180
GAAGGGGTCT TGGAAATCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA	240
TCTGCCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAGT TCTTTTGTTT	300
GCATGAGACA GTGATGCACA GAAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA	360
ACAGGGATTT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG	412

## (2) INFORMATION FOR SEQ ID NO:307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GGGGTTGTCT GAGGCCCAAG GGTGCTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG	60
---	----

CTTGCCCTT GTTGACAAG GGTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGG	120
AGCTCGCCCT GCTTGCCAG CTTCTCCAT AGCTGCTCCT TCCGCCTGAG CTTCTGGCG	180
TTGGGGACCT GGTGGGCGAG GACGTCTTTG GGGGAGGGA CTTTGATGT GTTCTCGAG	239

## (2) INFORMATION FOR SEQ ID NO:308:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT	60
CGCATCCTGC ATCCTTCAGA TGAGCTCACT CGGGTCACAC CAAGCCTTAA CTCAGCCCCA	120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT	180
CCACGGAGAC TGAGCCTGGC TGAGTCCTTC ACTAACACCC GTGAGTCCAC GACCACCATG	240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTCTGTC TGCCGTGTAC	300
GACCCCAAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACTCCTA CACGCCCAAG	360
ATGGCTGTGA TCCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCCA	420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCCTACGACA ATTTCTGGC TTCCAAGCCA	480
GCCAGCTCCA TCCTGAGGGA AGTGAGAGAA AAGAACGTCC GCAGGACCTC GAG	533

## (2) INFORMATION FOR SEQ ID NO:309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCGGCC AAAGAGGCCT ACCCTAAAAC ATTTATTTCAG AGGAGAAAAG AAAAAGGGGG	60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT	120
GGTGGGATTG TGCTCGTGT CCAATCATC GCCTTTCTGG TGGGAGGCTT GATTGCTCCA	180
GGGCCCCACA CGGCAGTGTG CTACATGTG GTGAAATGTG TGGATGCCCG TAAGAACCAT	240
CACAAGACAA AATGGTTCGT GCCTTGGGGA CCAATCATT GTGGCAAGAT CCTCGAG	297

## (2) INFORMATION FOR SEQ ID NO:310:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA	60
GGGGGTCTTT TTCCTTGCCC CTGCTCTCA CTCAGATGCG CTTCTTTTC GCCACTGTTT	120
GGCAAAGTTT TCTGTTAAGC CCCAGTTCT CCAGGTGCGT TACTATTCT GGGATCATGG	180

GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT 240  
ACCTCGAG 248

## (2) INFORMATION FOR SEQ ID NO:311:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTAA TATTTTAATA 60  
TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAATC TCCTAACATT 120  
TCTCTTCCTC AGTTTCCTAT TGTTTTGGTA GAGTATGTAG ACATTGCGA GATTAATTTA 180  
GAGTTGGTAG ATACATTCTG GATTTCAATTT TACTTTAGAT AGCAGGTTTG GCACTTTAAA 240  
TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300  
GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG 343

## (2) INFORMATION FOR SEQ ID NO:312:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60  
ACTCCATGCC CTTGTCCGAT GGTTTGCAAC TCCGATTTTG CACACCGCTC CACCGTGCCC 120  
CCCAGCGCAC ACCCATTCAC ACTCAGGCCA ACACTCTCGC TGAACACTTT TATAATTGTT 180  
AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA 240  
TTTACTTTTG CATTGCGGTT ACCTCGAG 268

## (2) INFORMATION FOR SEQ ID NO:313:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60  
GTGGTGGGAA GCTTCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC 120  
GACCCAAGCC CGCTGAGCAG GATGAGGAA GACAGAGATG TCAATGACCC CATGCCCAAC 180  
CGAGGCGGCA ATGGA CTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240  
CATGTTGAAG GAGTAGAAGT GGACTTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAT 300  
GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

## (2) INFORMATION FOR SEQ ID NO:314:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 514 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGAAGAA CATGAAGCAC CTGTGGTTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCGCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACTAT TGGGGCTGGA TCCGCCAGTC CCCAGGGAAA GGACTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAGAAGCT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCCTCCTTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTCACTCCTT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                     514

```

## (2) INFORMATION FOR SEQ ID NO:315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 215 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATT TTC ATCTAAGATC      60
TTTATTCTCT AACGTTCTTG GTCCTATTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTAAAA AATAACTAT CATGCCCTTC TCGAG                                     215

```

## (2) INFORMATION FOR SEQ ID NO:316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 788 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCCG      60
TCCTTGGA CT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAA GTGAAGACGG      120
CGTCCGACTG CGGGGCAGTG AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAGACG TTGTACCCGC AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTT ACTTGGAGAA GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTA AGGAGAAATG AGCCGTCCTG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAACATC	CCTCTCCTCC	540
TCTACCCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGGACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAATATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

## (2) INFORMATION FOR SEQ ID NO:317:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGTT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGGTTCTCAC	TTCTTGCTAT	ATCCTGATCA	TCACTATTGC	120
AAATATTGCA	AATTGGCCA	GTACTGCTAC	TGCAATCACA	ATCCAAAGGG	ATTGGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

## (2) INFORMATION FOR SEQ ID NO:318:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTTGTCTTTT	TTCCCCTTTA	TAGCTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TTGGATTTTA	TTTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGGTTCTC	TGCCTTCTAG	TTACACTGGT	GACCTTTCAC	180
AACCTTTACC	ACATTGAGTT	CATTCTTAC	TTTTCACTCT	TTCTCTGCCT	GGAGTGTTC	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

## (2) INFORMATION FOR SEQ ID NO:319:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAAC	TGAAGAAAAC	TAATACTGAA	GAAAAAAAT	ACTCTTCCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAAT	GGGGATCGCC	180
TCCCAACAGC	AGATTTCGAC	ATTACCTGAG	AGTCTTGATT	TAGGCTTGT	TTTTGTAAA	240
CCCATGTGTT	CTCGAG					256

## (2) INFORMATION FOR SEQ ID NO:320:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTTAAAC TTGGCGCGCT      300
CGAG                                         304

```

## (2) INFORMATION FOR SEQ ID NO:321:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTACCG TGCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:322:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GCGCCGTGTC CTTTTCGTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGGTGTG CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                         320

```

## (2) INFORMATION FOR SEQ ID NO:323:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```

GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCTCTCT CAGATGGGTT CCAAAAAGAA      60
GCCCAAAATT ATCCAGCAAA AAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT      120
GCCGCGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA      180
CAGGAGGGCG CAGTACCTC GCACCAAGGC CAGTGAACA GAGCACAATA AGAAAGGAAC      240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA      300
ACTCGAG                                           307

```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GCACCTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATCTTG GCTGCCTCGT      60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTTCTGGG AGCTTGAAG      120
ATGGAAAGCC CGTGTCTCTG TCACCGCTGG AGTCCAGGC ACACAGCCCC AGGTACACGG      180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA      240
ACCGCGCCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```

GAATTCGGCC TTCATGGCCT ACTCCAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA      60
TGGTGCTCTT CTATTTTCAC TCACAAATTC AACACATTTT GACTTGCTCG TGTCACCTAG      120
GGTTCCGCC TCAGGTATGT CTTCTTCCTT AATTTCTTTG CCGTCTTTGG TGCTGTTGAC      180
CTCACCTTTT CTGGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTGCAGCC GCCCCTGGTT      240
TCCTGAACAT TCCTTCTGTG GGGTCTTCCC CTCCTTCTCA CCCACCCTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

```

GAATTCGGCC TTCAGACTTG AAGTGGAGAA GGCTACGATT TTTTGTATGT CATTTTGTGT      60
AAGGGCGCAG ACTGCTGCGA ACAGAGTGGT GATAGCGCCT AAGCATAGTG TTAGAGTTTG      120
GATTAGTGGG CTATTTTCTG CTAGGGGGTG GAAGCGGATG AGTAAGAAGA TTCCTGCTAC      180
AACTATAGTG CTTGAGTGA GTAGGGCTGA GACTGGGGTG GGGCCTTCTA TGGCTGAGGG      240
GAGTCAGGGG TGGAGACCTA ATTGGGCTGA TTTGCCTGCT GCTGCTAGGA GGAGGCCTAG      300
TAGTGGGGTG AGGCTTGAT TAGCGTTTAG AAGGGCAAAC TCGAG                          345

```

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

```

GAATTCGGCC TTCATGNCCT ACCTTTCCGT CCGTTCTTTC ACGCCTTCCT CCTCATTTTC      60
CTTCCTTCTA TTTTCCCTTC CCTCTTTCCG CTTTCCTGCC CCGTTTCCTT CCTCCCTCCC      120
TTCCTCCTTC CTTCCTTCCT CTGCGTTCTT CCTCTCTCCT TGTTCCTTC CTCCTCCTCC      180
CCACTCCCTT TTCCTCTCCT CTTCCACCCC CAGTCTCCTA CTCCTCCAGTC CTCCTATCCC      240
CATGGAACAT ACACCTGCTT TGTCTGGGAG CCACGTTATT CTGCCAGCC AGACCTGGC      300
CAGGAGGATC AGGGTCACGG TCAGCTTGGG CCGAGAACCC TTCACATGAG ACAAGCTCCT      360
CTGCCAGGGT TTCCTGTGGG AAAGGCCCCA CTTCCCGACC CTCCTGGGCC ACTGCATGGG      420
GTCCCTCTT CGGCTTCTTC TCCCTCTCC ACCCGGCAGC CCCCCAGCT CGAG                          474

```

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

```

GAATTCGGCC AAAGAGGCCT AATTTACTCC CCAATATAAA ACATTTTACC TGCGATCTAT      60
GTGTACATAT TGAATGATGT GTAACAATAT CATAATTTT ATGTTCTGCA TTTTTCCTACT      120
TATATATCTT TATTTAAATG GACTTAACTT TACTAATGGA GTAATTTTGA GCTTTCAGAA      180
GGAGTTCTCA CTCGAAGATA AAGAACAGCT CGCTAACCC GAAAGAGGAA TCGATGCTCA      240
GCTTTTAGTT GCACCTCCTA AAGTTGCAGA ATTAAGACAA ATCTTTGAAC CAAAGAAGAA      300
AGAATTCTTA GAAATGAAA GAAAAGAAAG AATTGCCAGG CGCCTGGAAG GGATTGAAA      360
TGACACTCAG CCCATCCTCT TGCAGAGCTG CACAGGATTG GTGACTCACC GCCTGCTGGA      420
GGAAGACACC CCTCGATACA TGAGAGCCAG CGACCCTGCC AGCCCCACA TCGCCGATC      480
AAATGAAGAG GAGGAACTT CTGATTCTTC TCTAGAAAAG CAAACTCGAT CCAAATACTG      540
CACAGAAACC CTCGAG                                          556

```

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

```
GAATTCGGCC AAAGAGGCCT ACAAACCAT CCATAAATAA ACAAAGCTAA GAAAGCTAAG      60
AAACAAAGCT AAGAAACAAA GACTGAGGTG AGGGAGATTT GAGTATTTTT TTTTCTCTA      120
CCAACAAGTG AAGAATTGAA CACCTTAATC CATCTGATCT CCCAGGTGGA AGCCACAAAT      180
CTTTTTTTTT GTTTTGCTCA GCATATTGGC ACAGTGAGAA ATTCATTTTA TACTCTCTGG      240
CATCTCTCTT GTAAACTCAC CAAGTCTCAA TAAGTTCACA AAGAAGGCAG AGACAAATAA      300
CCCTAGAATG CAGGTGATTG TTTATTATG TATTTTCCTT GTTACATACC CACCTATACC      360
CAAGGCCTTT GCAGAAAGC TCGAG                                         385
```

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```
GAATTCGGCC AAAGAGGCCT AGGAAGCAGG AGTTTATTTT TATCCTTTTG TAAGTATTAA      60
CTCGGTAATC ACAACAAACA CGGAGCAATC TCAATGCTGT TTATCCGGAG GACAGTCTGC      120
GGGGTCGTGA CGATTCTTTT CTTCTTGAAG TTTTTCCTTT TCCTGAATCT CATAATGATT      180
CTTGGCCATG ATTCTGTCTT TTCAATGACT GTGGCTTCTA CTCGAACAAG ATCCTTTCCG      240
AGGAGTGGCT TGCCAAGCAG CGTGAAGTTG TCTGCCCCAA CCAGCAGGAC CTTCTCCAGT      300
CGAATTCTCT CTCCACACGC AAGGTCTAGT TCATTTCCAA TTAAGATCAG GTCTTCAGAG      360
GTCACCTTCC ACTGGCGGCT GGCAAAAGTGC ACCACGGCAA AGAGCCTGCC ATACTGCCCC      420
GTGACGATCA TCTCATTAC TTTCTTCACG ACCTCTGCAT GGTGTCTGGT CTCCTCAACT      480
GGGTCTGCA GAACAACCTC TGGCCAAGGT GGTGAATCA GGGATGTTT AGGAACATAT      540
CCTGGTAGAT ATGAAGTCT CTGTGAATTG AACCTTCGAG AAGCAGACCA AAGGGAGGCT      600
GCTCCGGGCC CCGAAGGTCT CAGGATGCTG TGGCTGCACG CGGACGCCAG CCGCCCTAAG      660
GTGACCGTCA GGAAGATGC TGCCATGGCC GCCGCC                                         696
```

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```
GAATTCGGCC AAAGAGGCCT AATTTTTTGT ACATCTGGGC CCTTAGTTTT TATTCTGTTT      60
ATTATATGTC TCTGTCTCTC TCTATTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT      120
GTGTGTGTGT GTGTGTCAGG AGTGCCACCC CCAGGGCCCT GTCAACCTCT CTTTCTCCT      180
CCATGGCTGT CTGCCTGCGT ATCTGTCTCT GAGAATCCTC GGGGCGGTCA GGGGATGTCA      240
GGAGGGGAAG GAGCCGCCCT CCCTATCTTG CTGCTCCTCT TGGCACTCAG GGGCACCTTC      300
CATGGAGCCA GACCGGGTGG AGGGGCTTCT GGGATTGGT GTCTGCTGCT GCCAGAGCAG      360
```

GAACCCCCAG TACTCGAG

378

## (2) INFORMATION FOR SEQ ID NO:332:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACATTGGGAT TATTGGTGCT GTGACCATGG CTGGCATCAT      60
GGCGGCAGAC AGAAGTGAAT CACCTAGTTT GACCCAAGAG AGAGCCAACC TGAGCGATGA      120
GCAGTGCACA CAGGTGACCT CCTTGTTCAT GTTGGTTCAT TCCTGCAGTG AGCAGTCTCC      180
TCAGGCCTCT GCACTTTACT ATGATGAATT TGCCAACCTG ATCCAACATG AAAAGCTGGA      240
TCCAAAAGCC CTGGAATGGG TTGGGCATAC CATCTGTAAT GATTTCAGG ATGCCTTCGT      300
ACTGGAAGCC TGTGTTGTTT CGGAAGGTGA CTTTCCATTT CCTGTGAAAG CACTGTACGG      360
ACTGGAAGAA TACGACACTC AGGATGGACT CGAG                                     394

```

## (2) INFORMATION FOR SEQ ID NO:333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

GAATTCGGCC AAAGAGGCCT ACTTATTTTC CTGTGAAAAT GCCTACCACA AAGAAGACAT      60
TGATGTTCTT ATCAAGCTTT TTCACCAGCC TTGGGTCCTT CATTGTAATT TGCTCTATTC      120
TTGGGACACA AGCATGGATC ACCAGTACAA TTGCTGTTAG AGACTCTGCT TCAAATGGGA      180
GCATTTTCAT CACTTACGGA CTTTTTCGTG GGGAGAGTAG TGAAGAATTG AGTCACGGAC      240
TTGCAGAACCC AAAGAAAAAG TTGTCAGTTT TAGAGATACT GAATAATTCT TCCCAAAAAA      300
ACTCTGCATT CGGTGACTAT CCTGTTCTCG GTCCCTGAGT TGATCACGTC GCTGCTGAGC      360
TCTGGGTTTA CCTTCTACAA CAGCATCAGC AACCCCTACC AGACATTCCT GGGGCCGACG      420
GGGGTGTACA CCTGGAACGG GCTCGGTGCA TCCTTCGTTT TTGTGACCAT GATACTGTTT      480
GTGGCGAACA CGCAGTCCAA CCAACTCTCC GAAGAGTTGT TCCAAATGCT TTACCCGACT      540
CCTCGAG                                     547

```

## (2) INFORMATION FOR SEQ ID NO:334:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GAATTCGGCC TTCATGGCCT AGGGGAAATT GAGTCAAGAA AAGGTTCAAT ATTTTTTAAT      60
GGTAGAATTG ACCGTATGTG TATGTGCTTC TAGAAGTGAT TCAGGAGAGA GGGTGAATG      120

```

```

GATGGTGTGG GACGGAGGGA AGAATTGGTG GAATGATGTT GGCAAAAAGG AATAGGCTTT 180
TGTGCATAAG TTGAGGGATT GGCCTTGCCT AGAAACATGG ACAATTCGTC TATAGTAAGA 240
AGAGAAAAGG TAGATCTATG ACCACAGACA TAGTCAGATA ATCATTTTAA AATTCCTTAA 300
TCAATAGATG TTTCTGATGT ATGGCAGGCA GTAAGCTAAG CAGTTTACAT ACCTGATTTC 360
ATTTAGTTAT TATAACAATC CCAGTCTAAA ACTCGAG 397

```

## (2) INFORMATION FOR SEQ ID NO:335:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT ACTCCATCCT TAAGGTCACC ATTGGTATGT TCCTGCTCTC 60
TGGAGATCCC TGCTTCAAGA CGCCACCATC GACTGCCAAG TCCATCTCCA TCCCAGGCCA 120
GGATTCCTCC CTGCAGCTGA CGTGTAAAGG TGGTGGGACC AGCAGTGGGG GCAGCAGCAC 180
CAATCCCTG ACTGGGTCCC GGCCCCCAA GGCTCGGCCC ACTATTCTCA GCTCAGGGCT 240
GCCAGAGGAA CCCGACCAGA ACCTGTCCAG CCCTGAGGAG GTGTTCCACT CTGGCCACTC 300
CTCGCAACTC GAG 313

```

## (2) INFORMATION FOR SEQ ID NO:336:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGCCTCC CAAAGTGCTG 60
GGATTACAGG CTTGAGCCAC CACACCTGGC TAGTGATTT GTAATTTTAT GAGCTGTTGC 120
TGTATTGCCT TCCACAGACA GTCAATTTAT AATCCCTCAG TATTATATAA TCAGGAAGAT 180
TCAGTGAATG GAATTTTGGG TTGGTGGAGG ACATATTTTT TAATTGGTAG ACCACTGAGT 240
GCTTTTGCAA ATCTCCTTAA ATCACATTAC AGCAGGAACA ACTATAGAAA ATACAATTAT 300
TTAGGAGCAA CCTGATCTGT GAGCTAATTT AATGAGTGGA GCCCAGCCTA CATGCTGAAG 360
AGCTCACATG CCTCCTACCT AGTTCCTTAA CTAGGTTTTT ACTCATGCCC ATTTTGTCTAT 420
ACTCTTGAAA CCTTCCTATC TTTGCATAGA ACATTATTCT TTCCACT 467

```

## (2) INFORMATION FOR SEQ ID NO:337:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCGGCC AAAGAGGCCT ACTTCTTTGA AGAACCATGA AGTCACACTA TATTGTGCTA 60

```

```

GCTCTAGCCT CCCTGACGTT CCTGCTGTGT CTCCCCGTGT CCCAGAGCTG TAACAAAGCA      120
CTCTGTGCCA GCGATGTGAG CAAATGCCTC ATTCAGGAGC TCTGCCAGTG CCGGCCTGGA      180
GAAGGGAAC T GCGGCTGCTG TAAGGAGTGC ATGCTGTGCC TCGGGGCCCT GTGGGACGAG      240
TGCTGCGACT GTGTCGGTAT GTGCAACCCT CGGAATTACA GCGACACCCC GCCCACATCC      300
AAGAGCACCG TGGAGGAGCT GCACGAGCCC ATTCCGTCCG CTGTCGAG                      348

```

## (2) INFORMATION FOR SEQ ID NO:338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GAATTCGGCC TTCATGGCCT AGCCAGTCTT CAGTTATAAC CACTCCACCC TCCTCACTTT      60
CTCTCTCTCT CTCTCTTTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT      120
ATGTAAAAAC TGTCACTAGT CAGCTGGCTC TTTTTCCTAT GAAATCTATC AGTACCTTTC      180
TCCATCCGTT GTTCTCAATA ATGACCACAG AGCCTGAGTA TACCAAGAAA ACCAATATTC      240
GCATTACAGG TCACTCGAG                      259

```

## (2) INFORMATION FOR SEQ ID NO:339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC AAAGAGGCCT AGCCTTCTGC AAGATGCTTC TGATTCTGCT GTCAGTGGCC      60
CTGCTGGCCT TCAGCTCAGC TCAGGACTTA GATGAAGATG TCAGCCAAGA AGACGTTCCC      120
TTGTAATAT CAGATGGAGG AGACTCTGAG CAGTTCATAG ATGAGGAGCG TCAGGGACCA      180
CCT                                          183

```

## (2) INFORMATION FOR SEQ ID NO:340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

GAATTCGGCC TTCATGGCCT AGTTTAACT GAGTGCAACA AGTATTTTCG TTAAGAGATT      60
TTTTTTCGTA ATTTACCATT CTGCTGAATC AATTTTAAAT CCAGTTGGAA GCTCTAAAAT      120
TCTAACATAA TTCAGAAGCA TTAATAAAGA AGACTAAGGA AGAGAAAGCT ACATTTTAT      180
TTCAGCTTGT ATTGCATTGT GCAGAAAGGA AAATAGTCTA GCTAATTTAC TTTTCCTATG      240
AAAAACCTTA GAAGGCTCCT CGAG                      264

```

## (2) INFORMATION FOR SEQ ID NO:341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACCT TTTCACCATT TTGGTGAACC CTTTAAAGT AAATTTACTC      120
AATGCTTTAA AATTCATAGT CTTAAAATAA ATGTGAATTT TGTTTCCAGG TATTTATTCT      180
GGGGTACAAA AACTTCCCAG AATTTACAGT AGGAAAGGAA ACCCCTTTAT GATGTGGCTT      240
ATTATTACAA GCATTAGAGG ATGATGCTGG CTAAGTCAAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACCTTAG TCTGTGTTTG AGCAATCTCG AG          412

```

## (2) INFORMATION FOR SEQ ID NO:342:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGTC CGTCTGGGGT      240
GAGTGTCTCT CTTTCTCANG GGATTTTCATG TGGCATTATT TGTTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCTT GGAATGAAAG AATGGGGTGA CTCGAG          466

```

## (2) INFORMATION FOR SEQ ID NO:343:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTT TAGAACTACC      180
TTGAACCTTA AATTTTAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTAAGAAC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGCTCT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG          328

```

## (2) INFORMATION FOR SEQ ID NO:344:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GAATTCGGCC TTCATGGCCT AGTGACCAGA CATAAGAACT CATTTTGTAGT TAAAGCATTT      60
TAAAAAAGTA TACAAGGCAG AGTTGCAAAC AATCTCAGCC TATGAAAAGG ACAGCTGCAG      120
TCAATGTTCC CACTAATATT TTCCATCCGT GTACTGAGTG AATTTGTAAT GTGCAACTCA      180
TGTCAGAGAA ATAAACAGAT GTGCACCACA AGCGGAACAA CAATGAAAGA ACTTACATAG      240
ATTTTATTA AGATTGAACT TTTGATGTTG ATTCCACTGG TAAGAGAGCA CTGTAGGCAA      300
AGGCTTGTA TTTATAAAGT TATCTCCTAT TGAGGAAGAT GAAGATGTCA ATACTCCCCA      360
ACAGAATGCT TTGAGCTCTT TCTAGTAGAT CTGTGCCAAC TCTGAAACAC CTCGAG      416

```

## (2) INFORMATION FOR SEQ ID NO:345:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

```

GAATTCGGCC TTCATGGCCT AGTAAATACA AAATACAAAA ATACTGGTGA GAGAATGGGA      60
TGATGATTAT ATTCCTGGTT CAGTTTTTCT TCCTGAGAAA TTGATAATA CATCTTTTGA      120
TTTTTAATAA GTGAAATAAC TGGTGACTGT GTTGATGTG TGTGTGTGTG TTTTTTTTTT      180
TTTTTTTAAA TAGAAGTGTG AAAAGAACT TCATCCACGG AAACCTTCAGG ATAATTTTGA      240
AACAGGCAAG TCATTTCTTA TCTTTTATA ATCTCTGCCT TGTGGGATTT GGTTCGTTT      300
ACCTAACTTT GATTTTAGTG GGAGTATGTG AGCTGTGACT CGAG                        344

```

## (2) INFORMATION FOR SEQ ID NO:346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGCCTTCGGA ACCCCACCAG AGTCACAGCC AGGAAGGGCA      60
GCGGGGCGCA CCAGGCCGAA GGCTCACGCC ACAGGGAGGG CAGCTAGGAC ATGGGGGGAA      120
GCGCGTTAAA CCAGGGAGTC CTGGAAGGGG ACGACGCCCC CGGCCAGTCC CTGTACGAGC      180
GGTTAAGTCA GAGGATGCTG GACATCTCGG GGGACCGGGG CGTGCTGAAG GACGTCATCC      240
GAGAAGGAGC TGGAGACCTA GTGGCGCCTG ATGCTTCGGT GCTAGATGCT TCGTCTGGG      300
TAAACTCCTC GACTCCCAAG GCCCAGCTC CATCTTTACC TCAGAGCCTC CTGAACCTCC      360
TCCTCCAGCC TCACCTTCCT CCAGCCTCAC CACTCCTCCC TGGACCTGCA GTCCTGCACC      420
CCCGGGGGCC TCAGAACTAC CCCTTCAGG GCCTCAGAAC TACCCCTACG GTTCTCCTG      480

```

CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540  
CGAG 544

## (2) INFORMATION FOR SEQ ID NO:347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG CCTACCCAGT GATTGTCACC ATGGCCAGCA AGAGGAAATC CACCACACCA 60  
TGCATGATCC CAGTGAAGAC TGTGGTGTG CAAGATGCCA GCATGGAGGC CCAGCCCGCT 120  
GAGACCTTGC CTGAAGGACC CCAGCAGGAT CTGCCCCCAG AAGCATCTGC TGCCAGCAGT 180  
GAGGCAGCAC AGAACCCAG CAGTACTGAT GGCTCTACAC TGGCCAATGG GCATCGGAGC 240  
ACTTTAGATG GCTATTTATA TTCCTGTAAA TACTGCGATT TCAGATCCCA TGACATGACC 300  
CAATTTGTGG GACATATGAA CTCAGAGCAC ACAGACTTTA ATAAAGACCC AACCTTTGTA 360  
TGCAGTGGGT GCAGTTTCTT GGCAAAAACC CCTGAGGGGC TTTCCTTGCA CAATGCCACA 420  
TGTCACCTCCG GGAAGCCAG CTTTGTGTGG AACGTGGCCA AGCCAGACAA TCATGTGGTT 480  
GTGGAGCAGA GCATCCCTGA GAGCACCAGC ACTCTGACC TAGCGGGTGA GCCCAGTGCT 540  
GAAGGGGCTG ATGGACAGGC AGAGCTCGAG 570

## (2) INFORMATION FOR SEQ ID NO:348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAAAAAGT TTTCAAAGGG AAGTAATCTT AAATCTGTAT 60  
ACTATTTTCT ATGATGGAAA TTCTGTGAAG AAACAATAAC AAATTCTCCC TGACTCTGT 120  
CTGTCCTAAT AGTAAGGTGG TCTTTCTTCT AATCTCCCCA TCCATCCACC CATCAGGAAG 180  
CAACAGGGTA CCTTGTGTGA GTAAGTGTAG ATTTCTGACT TCTTCTCGCA CCTTCAGCTG 240  
GAGCACCTGT TGTAAGATGT GCTGCCGAG GTTCTCTGG GCAATCCCCA TTCGCTCGAG 300

## (2) INFORMATION FOR SEQ ID NO:349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC TTCATGGCCT AACAAACCACC ACCACCTGGA CGCCCAGCAG CACAACCACC 60  
ATAGCCGGCC TCAGGGTCAC AGAAAGCAAA GGGCACTCAG AATCATGGCA CCTAAGTCTG 120  
GACACTGCCA TCAGGGTTGC ATTGGCTGTC GCTGTGCTCA AAAGTGTGCT TTTGGGACTG 180



CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC	240
TGACCAACAG AGTGTGGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC	300
CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCCGTGAG	360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCCTGAAT CACCGACGCT	420
CGAG	424

## (2) INFORMATION FOR SEQ ID NO:350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTTGAGCTT GGAACACTT GTACATGGTT	60
CCCCGGGACA TAAATGTAGA AGTTCTGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG	120
GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCTAGGAT	180
CAGATATCTG CCGATGATGA CTTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCCT	240
GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATTT CAGGGTAAGC	300
TGTAGACAAC AATATATTTG ACCCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTTAACTA	360
GAGTTATTTC AAACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTTCCTCAAT	420
TATGCATATA AAAGCAATCC TCGAG	445

## (2) INFORMATION FOR SEQ ID NO:351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTCGGTTC ATGGCCTAAT TTTGGAAC TAAGACAGAT TTTTGTTTTT TGTTTTTTTA	60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCTT ACAGAGAAAT	120
AGAAGCAAAA AAAGGAACCA ATGGAATAAT TAAACTGAA AAATAGAATA TCTGAAATAA	180
AAAATTCACT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTTGAA GAAAGAGCAA	240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG	278

## (2) INFORMATION FOR SEQ ID NO:352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGCCT TCATGGCCTA CAGATTATCT TACTACTGAAC TGATCAAGTA CTTTGAAAAT	60
GACTTCGAAA TTTATCTTGG TGTCCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACCTT	120

```

TTCTCTCCAA CCAGACCAGC AAAAGGTTCT ACTAGTTTCT TTTGATGGAT TCCGTTGGGA      180
TTACTTATAT AAAGTTCCAA CGCCCCATT TCATTATATT ATGAAATATG GTGTTACCGT      240
GAAGCAAGTT ACTAATGTTT TTATTACAAA AACCTACCCT AACCATTATA CTTTGGTAAC      300
TGGCCTCTTT GCAGAGAATC ATGGGATTGT TGCAAATGAT ATGTTTGATC CTATTCGGAA      360
CAAATCTTTC TCCTTGGATC ACATGAATAT TTATGATTCC AAGTTTTGGG AAGAAGCGAC      420
ACCAATATGG ATCACAAACC AGATGGCAGG ACTCGAG                                457

```

## (2) INFORMATION FOR SEQ ID NO:353:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```

GAATTCGGCC TTATGGCCTA GCAGGCGCCA AGGTAACATG AACAAACAGC TGCTTGCTGC      60
CCCCAAGCTT TAGTTTCTAG TGGGCTGGA GCAATTGTGA AGGACAATC CACCCAAGGC      120
CCAGTATTGA AGAGGGGTAG GGTGGGAGGA TTGTACATAT CGCGAACGCT TGCGAAATCT      180
CTAGATTTTT TTTCCTCCTA GGAAATAATA ATTTTAAAAA AGGCTTGTA AAAATAATAA      240
AATGTTTCAT GACAGCAGCA GATGTAAAC TCCCAGTACT CCGGGCGACC TCGAG          295

```

## (2) INFORMATION FOR SEQ ID NO:354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```

GCCTAGACAT GATGGTGGCC ACGTGCCAGG GGACCACACC CTATGTACAA AGCAGGAGAA      60
TGATGCTCCC AGCTGAGCTG CAGGATGGGC GCTGGGCTGA CTGGAGGGGT AGACGGGGTG      120
GGGTCTGACC CCATTAGCCT TTCCCATCC AACCTGGGCC CCCATAAGCC ATTCTCTGGC      180
CCTCTGCACA AGACAGACTC AGCAAATCTG CGAGGTATGG GGATTCTGCC AACTCCCCAC      240
CTCGCCTCAC CTTCCTAGG TCTGCGCGTT AGGAGATTCT GGAGCCAGAG GGAGAGACCC      300
CAGAACTCC CCGGTCGGCG ACCCAGCCCG AGACGCCTGG GTCCCAAGG GAAGCTGAAC      360
GCCCCAGAA TGGGAAATG GAGAGAGAAC CTGAAAGAGC CCCTGTAAC CGAG          414

```

## (2) INFORMATION FOR SEQ ID NO:355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```

GAATTCGGCC ATCATGGCCT ACTCCCGAGT AGCTGGGACT ACAGGCATGT GCCACCACGC      60
CCAGCTAATT TTTTGTATTT TTTTGTAGTAG AGATGGGGTT CCACCATGTT AGCTAGGATG      120

```

```

ATTTCGATTT CCTGACCTTG TGATCCGCCC GCCTCGGCCT CCCAAAATGC TGGGATTATA      180
GGTGTGAGCC ACCACGTGGC CTCATTTCAT TCTTTCATGT GGATAGGCAG TTGTTCCAGA      240
AGTATATAGT GAGGAGCTTC TTCTTCTCT AATGATCTGC AATGTCACCT TCATCATTTA      300
TGAAGGTTGC ACATATACAT GGGAATTTT TAGTCTGGCA TTAAATGTTT TCACAAAAGAG      360
TTCCTGCAAA CGTTTTGTT TTTATTTCCT ACTGTTCCCT TCACGTACTC TCTACTGAAC      420
TAAACTCTCT AATGTGTCTC GAG                                         443

```

## (2) INFORMATION FOR SEQ ID NO:356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTC AAGAGCAGCC CACCTGTTCA GTATTCATAC      60
CCACATATCC ATAATAGAGC TCTTCTCTTC CCCCGGGTTC CTCTGCCTCA GCCTTTTCCT      120
CTTAGCAGAT GCCATCTGCA GGGCCACTTG GCTGCCCCTA GCAGTAACCG CACAGTCTTC      180
CACATTACT CCCTCAGCCT CAGCTGCTCC TGCAGCCCAG GCACTGTCTC TGTCTCTGCA      240
TTGCTCAAGC CTCACCATC TCGGTTACAC CCCACAGCCA CTCGAG                      286

```

## (2) INFORMATION FOR SEQ ID NO:357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GAATTCGGCC TTCATGGCCT ACTGCCTTAG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA      60
GCCACCATGC CCAGCCCTAT AGTAGTTCTT CTTTGGCCCC TTAATATCCT CACCCACATG      120
TCCTGTACCC TGCCTGAACC CTCCTCCTCT TTTTGTCTG ATCTTTGAGC TCCCTAGAGC      180
CCATAATTCT TTAGAGCAGG TATGTCCCGA GTCTGAAACA TGCCCTTATT TGTCCCAAGC      240
TCTGGACATT TCTCACCCA TCTCTCGAG                      269

```

## (2) INFORMATION FOR SEQ ID NO:358:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

GAATTCGGCC TTCATGGCCT ACCAAGGAAG CCTTTCTGTT TTTGGCCCAA GGAGCGTCAA      60
TAAGATCTTT GAAAATACTT TGAAGTCATT TTGTGTGTGT GTATGTGCAT ACACACCTGA      120
TTTGTTTTAT TTTTATTTT TATTTTTTGA GTTAGGGTCT GGCTCTGTCG TCCAGGCTAG      180
AGTGCAGTGG TGTGGTCTCA GCTCACTGCA ACCTCTGCCT CCCAGGCTCA AGCCGCCCCC      240

```

CCACCTCGAG

250

## (2) INFORMATION FOR SEQ ID NO:359:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC	TTCATGGCCT	AATGGGAGAT	TGGTGGGAGT	AGGGAACACA	AAAGGCATGG	60
GAAAAGAAGA	TAGGTTGTAT	TTGGTCATA	CTGACACCAA	CATGCCTAAA	GGATAGCCCT	120
GTGAAAAAAG	CTAGCAGACA	GTTGAACTGC	GGCTGTGAAA	CAGGAAGCCG	TGAGGGCTAG	180
ACTCATCGTT	GTAGTCATTC	GTAAAGAGTA	AATACTTGA	GCTATTGTAG	TAGATGGTAT	240
CACCACGGAA	CACTCGAG					258

## (2) INFORMATION FOR SEQ ID NO:360:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GAATTCGGCC	TTCATGGCCT	AGGAAGCCAC	AGGTCGGCTC	TGCATTAGCA	GGAGCAGCCG	60
CCCTCGCTGG	CGGGGGCTC	CTGGGGTTTG	TCCAGCTTGA	TGTCGATCAT	CCCTTCTTTG	120
CTTTTCTCCT	GGACATTCTC	CATTCCGGGT	AGAGCCGACG	CCACACGTCG	AAAAAGCTGC	180
TTCACGTTGT	AGCCAGTCTT	CGCACTGGTC	TCAATGAACA	TGACGCTCAG	TTCTTTGGCG	240
CGCTGCCCCC	CCCCTCGAG					259

## (2) INFORMATION FOR SEQ ID NO:361:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GAATTCGGCC	TTCATGGCCT	AAAGATTAGC	CTGGGTAACA	TAGTGAGACC	CTGTCTCTAT	60
TAAAAAATAA	TAATAAAAAT	AACATTACAA	TTGGTATTGT	TCACTAAGGT	ATTGGTTGTT	120
AAGGCATTCA	TTAAGGTATT	GTTAAAACTT	GTGTTAAGCA	TGTTAAAGTC	TCAGTAACTT	180
TGGGATAGAA	ATAAAATGTG	ATAAAAAGCT	GAAAGAAACC	ACCACAAGGG	AGAGTCCTTT	240
TTGAAATATT	AGAGACATAA	TGCTGTCTAA	TAAAAAACGA	CATCAAAGAA	AAACTACACT	300
ACAGTGACTG	CAGACTTAAT	GTTGGCCAAC	CATGCATCCT	CCCTAGAAAT	GCATTGGAAT	360
TTGATTTACT	AATCTTTTAT	TTAGGAAATT	TACATTTTTA	CATTAGTGAG	ATTGGCCTCG	420
AG						422

## (2) INFORMATION FOR SEQ ID NO:362:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAAATA      60
TCTTTTCTC  TGCAAAGCCT TCATATAATT GTTGTTATTA TAACAGTGAT GATGACTGCC      120
ACTCATTACA ACTGCTGTG  TTAATCTTTG TTGTTATTTT AAACCATATG TTATTTAAAC      180
CATAACTGC  ATCATAAAAG CAGTTTCTTT CTAATCCATG ATGACACCTG CTAGCCAGGT      240
ATCGTATCAA TTCTTCACAG GTCTATTGAA TTCTAGACCT GCCTCGAG      288

```

## (2) INFORMATION FOR SEQ ID NO:363:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

AAAAATTCA  ACAAATCCTG AAGTCTTCT GTGAAGTGAC CAGTTCTGAA CTTGAAGAT      60
AAATAATTGC TGTAATTCCT TTTTGATTTT CTTTTCAG GTTCATGGTC CTTGGTAATT      120
TCATTCATGG AAAAAATCT TATTATAATA ACAACAAAGA TTGTATATT TTTGACTTTA      180
TATTTCTGA  GCTCTCCTGA CTTGTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT      240
GAGGGCCCAA AACAGAGACT CGAG      264

```

## (2) INFORMATION FOR SEQ ID NO:364:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGACCCTCAT CAATAGATGG AGACATACAG AAATAGTCAA      60
ACCACATCTA CAAAATGCCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTTGGAT      120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG      180
ACGTGAAGTC CGTGGAAGCC TGTGGCTACA AAAAATGTTG AGCCGTAGAT GCCGTCGGAA      240
ATGGTGAAGG GAGACTCGAG      260

```

## (2) INFORMATION FOR SEQ ID NO:365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATTT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240
AGCAGGATGT	GCAGAAGACA	CAGGAGAAGT	ATGAGAAAGT	GCTGGAAGAT	GTGGGCAAGA	300
CCACACCCCA	GTACATGGAG	AACAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG	AGTTTTCAGA	ATTAGAATAC	TCAGAAATGG	GATCATCGTT	CAGTGTCTCT	60
CCAAAAGCAG	AATCTGCCGT	AATAGTAGCA	AATCCTAGGG	AAGAAATAAT	CGTGAAAAAT	120
AAAGATGAAG	AAGAGAAGTT	AGTTAGTAAT	AACATCCTTC	ATAATCAACA	AGAGTTACCT	180
ACAGCTCTTA	CTAAATTGGT	TAAAGAGGTT	GAAGTTGTGT	CTTCAGAAAA	AGCAAAAGAC	240
AGTTTTAATG	AAAAGAGAGT	TGCAGTGGAA	GCTCCTATGA	GGGAGGAATA	TGCAGACTTC	300
AAACCATTTG	AGCGAGTATG	GGATCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAC	GGAGCGAAAC	TCTGTCTCAA	AAAAAAAAAA	60
AAAAAAAAAA	ACCGAGTATA	AAAGGCATTT	TTTTCTTTA	AACTAAGTAA	AATATAATGT	120
TGAATAGTTC	TATTTTGCTT	AACGGGCTTT	TGTTATTGTG	TTTGTGTAGA	AATTGGCATT	180
TTTCACATAG	AAATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACTTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTGGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGGATT	TTACAGGATA	360
TTCTCGAG						368

## (2) INFORMATION FOR SEQ ID NO:369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC	TTCATGGCCT	ACATTCGGAG	AAGTTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTTACTACAT	TTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GCGTGTGCAA	120
TTTAAATTAC	AATGGTCGAG	GAAGCTCTTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCTG	GGGCCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTTGGT	GTGTTCAGG	AAAGCAGGAC	AACCTCGAG	299

## (2) INFORMATION FOR SEQ ID NO:370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTTCTTTTG	60
TTATACGACG	ATTATTGTGC	AACCCCACTA	TCTTTGCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CGTGACAGTC	ATCTTCTCAT	CACCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTTCTCTCC	CAGACAAATC	240
TTCGTCTCTC	TGTTCTTGGA	AACTCAAAGA	ACTAAGCACC	TCCCTCGAG		289

## (2) INFORMATION FOR SEQ ID NO:371:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

```

AATTCGGCCT TCATGGCCTA CAAGCTCGAT CATTATCCTT CTGTGAGTTA CCATCTGCCA      60
AGTTCATCCG ACACCCTCTT CAATTCTCCC AAGTCGCTCT TTCTGGGAAA AGTTATAGAA      120
ACAGGGAAAA TTGACCAAGA GATTCACAAA TACAACACCC CAGGATTCAC TGGTTGCCTC      180
TCCAGAGTCC AGTTCAACCA GATCGCCCTT CTCAAGGCCG CCTTGAGGCA GACAAACGCC      240
TCGGCTCACG TCCACATCCA GGGCGAGCTG GTGGAGTCCA ACTGCGGGGC CTCGCCGCTG      300
ACCTCTCTCC CCATGTCGTC CGCCACCGAC CCCTGGCACC TGGATCACCT GGATTCAGCC      360
AGTGGCGATT TTCCATATAA TCCAGGACAA GGCCAAGCTA TAAGAAATGG AGTCAACAGA      420
AACTCGGCTA TCATTGGAGG CGTCATTGCT GTGGTGATTT TCACCATCCT GTGCACCCTG      480
GTCTTCCTGA TCCGGTACAT GTTCCGCCAC AAGGGCACCT ACCATACCAA CGTTCTCGAG      540

```

## (2) INFORMATION FOR SEQ ID NO:372:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

```

TCGACCCCTG GCTAATGACA AACTATGTGA CCTTCATGGT GGGGGAGATT CTGCTCCTCA      60
TCCTGACCAT CTGCTCCCTG GCTGCCATCT TTCCCCGGGC CTTTCCTAAG AAGCTTGTTG      120
CCTTCTCAAC TTGGATTGAC CGGACCCGCT GGGCCAGGAA CACCTGGGCC ATGCTCGCCA      180
TCTTCATCCT GGTGATGGCA AATGTCGTGG ACATGCTCAG CTGTCTCCAG TACTACACGG      240
GACCCAGCAA TGCAACGGCA GGGATGGAAA CGGAGGGCAG CTGCCTGGAG AACCCCAAGT      300
ATTACAACCTA TGTGGCCGTG CTGTCCCTCA TCGCCACCAT CATGCTGGTG CAGGTCAGCC      360
ACATGGTGAA GCTCACGCTC ATGCTGCTCG TCGCAGGCGC CGTGGCCACC ATCAACCTCT      420
ATGCCTGGCG TCCCGTCTTT GATGAATACG ACCACAAGCG TTTCGGGAG CACGACTTAC      480
CTATGSGTGC CTTAGAGCAG ATGCAAGGAT TCAACCCAGG GCTCGAG      527

```

## (2) INFORMATION FOR SEQ ID NO:373:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

```

GGCAAGAAAG GATGTCCGCA CAGCTGGCTG CTGCTGAGAG CAGACAAAAG AAGCTGGAAA      60
TGGAGAAGCT TCAGCTACAA GCCCTTGAGC AAGAGCACAA GAAGCTGGCT GCCCGCCTTG      120
AGGAAGAGCG TGGCAAGAAC AAGCAGGTGG TCCTGATGCT GGTCAAAGAG TGCAAGCAGC      180
TCTCAGGCAA AGTCATAGAG GAGGCCCAGA AGCTCGAAGA CGTAATGGCC AAACCTGGAAG      240
AGGAAAAGAA AAAGACGAAT GAATTAGAAG AGGAACTCTC CGCTGAGAAA CGAAGAAGCA      300
CAGAAATGGA AGCTCAGATG GAAAAACAAC TCTCTGAGTT TGACACTGAG CGGGAACAGC      360
TTCGTGCCAA GCTGAACCGG GAAGAAGCAC ACACCACAAA CCTCGAG      407

```

## (2) INFORMATION FOR SEQ ID NO:374:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```

GAATTCGGCC TTCATGGCCT ACTCTGTTTT CTCCTGGAC TTATGTGCTT CGTCTGGAAT      60
GTTACATCTC TTCCTCTCTT TCTTTTTTTT TGGTCCCAT GTTGACTGTT TTATTGGGGT      120
TTCTGGATAT CTCGGGGCCA CCTCACAGGA AGCGGTTTGC AATGAGATCA TAAACATTGC      180
CGAAAAATCT GTTCATTACT GCAGCACTGT TTCTCATCCC CTTGACTTTC ATCACAAGGT      240
ATCCCCTTCT GACAATAAAT CATCTTTAAT CATTCTCAG CAACCTCAAG CCCAGCAGCG      300
AAGAGTCACC CCCTATCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGACCTG CCCCCAAACC      60
AACAAGGAGA ACAAGCTCAG TCTTCTGTGT CTTAATTTTT GGCTTTACTC TTAGCCCTGC      120
CCCATTTCCT AGGCTCTCCA CAGTCCAGCC GCTTTGAGCT ACTTTCCTT CCCTGATATG      180
TGCAGCTCTC TCACCTCTGA GCCTCCGCAC CTGCTGTTCC ACAGCACTCT CCGCATTGCC      240
TTCTCCCACT GTGGTCACT GCTGAGCTGT GTTCAGGCCC TTTGGGAAAC CCTCTCTTTC      300
ACTCCTTTTC CCTGGTCTGG CTTGGGAGCC CATGCTTACC CCTGTCAGGA CACCTGAAA      360
CCCAGCAGTG AAAACATGAC ACTTCCTTGT CTGGCTGATT TTCTTAGTGA AGCGAGTAGG      420
AGTTTCCTTT GTCAGGACTT CAGCAAGCAA AATTCAGGAG AGGTCATAAA ATGTCTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCTAGA CCTGCCTCGA GTAACCAGAG AGTCTTGTC ACATTAAACAC TAGCAGTATT      60
TCCAACACTT TATTTTTTTA ACTTCCTTTA TTATACAGAA GCAGGATCTA TGTTTTTTAC      120
TCTTTTTCG TATTTGATGT GTCTTATGG AAATCATAAA ACTTCAGCCT TCCTTGATT      180
TTGTGGCTTC ATGTTTCGGC AAACAAATAT CATCTGGGCT GTCTTCTGTG CAGGAAATGT      240
CATTGCACAA AAGTTAACGG AGGCTTGGGA AACTGAGCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACTCA	TCACCGCTCA	CGTTCAGTAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC	120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTCACG	TTCTCCAACC	AGACACCATG	180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG	240
AACAAGACAG	TGAGCTTCTT	ATGCTGCCCA	GAGCAAAACG	AGGACGAAGT	GCAGAATGCC	300
TACATACTAC	CAGAATGTCT	CGAG				324

## (2) INFORMATION FOR SEQ ID NO:378:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	AGCTTGAAAG	TTCCATTACT	60
AGAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACCT	ATTTTCATCTA	GTAAGAGTAT	120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCAG	GACAATGGAC	CTAAATACAG	180
TTAACTTTTG	TTTTTCACTC	CTTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTAGGT	240
TCTATCAGAA	GTACTCAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT	300
GCTTGGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG	352

## (2) INFORMATION FOR SEQ ID NO:379:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGGAAAC	TCTATTGCCT	GCCCTGCACA	60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTTCTAA	AGTTTGTCCA	ACATGTCATT	120
GACTGAGTTT	TGTATCATTT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA	180
TGCAAATGCA	TTTTCCACCT	CTTGCACTCC	TTTTTCTAAG	TCACCTCACT	TCTCATTTC	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G			271

## (2) INFORMATION FOR SEQ ID NO:380:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTCCG TGAAGCGATT CCTGCAGGCG      60
TTGGTTCCCC TCTTTGACCT GGTACAAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATTGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAAACATATG TAATAAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACCT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G                                     371

```

## (2) INFORMATION FOR SEQ ID NO:381:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTTAAGCTAT AAATGTGTTA ACATGTATAT      60
ATACCATTTA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTCA TAATCTCTGA GGAAAACAAA ACCTGTTTTC TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTTAAATTT GATGTCAGGT CAACATTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG                                     277

```

## (2) INFORMATION FOR SEQ ID NO:382:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAACTGA GAAAGACAAA      60
GGAGTAGAAC GTTTACTCAA ATAAGTAATA ACAGAAAACCT TTCCAAACCA GAATATACAG      120
GTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAACTCAG ACAAGAATAC TCCAATTTAC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG                                     290

```

## (2) INFORMATION FOR SEQ ID NO:383:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTTCTTTCTA GTGGGTCTCA      60
TG TAGAGATA GAGATATTTT TTTGTTT TAGAGATTCCAAA GTATATATTT TTAGTGTAAG      120
AATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCNTTGTG      180

```

ATAATCCCAT AGCAATTTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240  
G 241

## (2) INFORMATION FOR SEQ ID NO:384:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 299 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60  
 GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC 120  
 TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCTATAC 180  
 CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTCTG TCAGAGAGAA AGTTCTGCCC 240  
 TCCCTGCTCA AAGGTGTCCA TGCCAAC TAGTCCCTG TAGCTACCTG GGTCTCGAG 299

## (2) INFORMATION FOR SEQ ID NO:385:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60  
 TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120  
 AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180  
 AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240  
 AGGCAGGTCT AGAATTC AAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG 300  
 AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360  
 TCTAGTGCCA GCACTTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420  
 GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480  
 CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG 540  
 CTCGAG 546

## (2) INFORMATION FOR SEQ ID NO:386:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTTCC 60  
 CAAAGTGTTT GTATTGTTT ACATTTCCAC GAGCAGTGTG TGAGAGCTCC AGTTCTTGCA 120  
 CATCCTAGCC AAAAAAGGT TCTGTTTTT AAAGACAATT TTTTTTTTCT TTGAGAGTTT 180

CGCCCTAGTC	CCCCAGGCTG	GAGTGCAGTG	GTAAGCGAAT	CCCTGCTACA	GGCCAGAGAC	240
TGTTCTCAGT	TGGTTTTTAC	ACCAAGTATC	GCACTTCATT	CTAACACTCC	ACCATTTTAC	300
AAATGAGATT	TCTCGAG					317

## (2) INFORMATION FOR SEQ ID NO:387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCGGCC	TTCA*GGCCT	AGGTCAGGTT	AGTCAGCTAA	TGATAAGAG	ACTTGAAATT	60
ACTCTTTTGG	GATTAGCAAA	TAGAAGGGAA	AAACATGATA	AGGGCACAGA	GCGGTGGGTC	120
TGGGGGAAAA	AGCAGAGGCA	CAGTTTGAAA	AAAATGTGTA	AGAGACTGAC	TAGGTAAGAT	180
ATGGTCACAG	TTCATAAGTC	CTTTGAATTC	TAGGATTAAA	AAGGTGAACT	CGAG	234

## (2) INFORMATION FOR SEQ ID NO:388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCGGCC	TTCA*GGCCT	ACTAGATAAG	TGCAATTCC	ATCTGCTTCT	GATTTCCTAC	60
GTCAGTCCCC	TGGTCCACAC	ACTGTGATCT	TCTGCCCCCA	TCTGAGTGCC	GCATACTCAG	120
CCTTGTCCTT	GCATCAGACC	CCGGCCCAGC	ACAGTAACGA	GAATGGGCTT	CCTAAACACA	180
AATCTGATT	GTTCGCCTT	CCACTTCCTA	GTGGCTTCAT	TCTCGTGCCC	TCACTCAGGG	240
CCCTCACACA	TGCTGTTCCC	TGCACCTCCG	ACACCCTTCC	CAGCGCCCCT	CGAG	294

## (2) INFORMATION FOR SEQ ID NO:389:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC	TTCA*GGCCT	AAGCAAAGCT	AAGTGTAATA	CTAAAAAGCA	GTTTGTGCA	60
ACTGGTCATA	AAAGTGATTA	AATCTAAAGC	TGGCATTAA	AAGGAAGCAA	GGTAATAAAA	120
CAAAAATATA	AACAGCTTTG	AGAAAGTACA	CCTAATAACA	AAATCTTGTA	ACACAACAAA	180
TGAAAATCAC	AAAAAATATA	AGGAGACTCC	TCGAG			215

## (2) INFORMATION FOR SEQ ID NO:390:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT      60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG      120
ACGTCCTCAG ACTTGTGTTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT      180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT      240
TATATATATA ACCTCCATAT ATTTTATACT ATTTTCATATT TTTATACTAT CAGATTAATG      300
TTTTATATTT TATCTATCAT TTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC      360
ATTCCTATGG GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC      420
CTTTTTGAGG GGACAGGGAC TTTCTTCTTT TCCCTCATCT TCATCTTCCC CCTCGAG      477
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGTTAGTCAG AGTGAAATAT TCAATAATGA GTGGTGCAGC      60
CTTGGGACTT GAGATTGTTT TTGTCTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG      120
AGACTTTAAG AAACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG      180
CTTCTTTATT GTCTTCATAC TGCCTCTGGA TGTAGTAGC ACAATATACA ACCGGTGCAA      240
GCTCGAG      247
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGACACTTC      60
CAGCAACAGT AAAAAAAGT AATTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT      120
ACCCTTGGGT GCTCACACGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAAGCC      180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTAATT      240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GCGGTGAAG AACATGCCAA TGGCCAAAAG      300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGCTCATGGC      360
CTCGAG      366
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```
GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT    60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAATT TTCCGTTTGA CAATATTGG    120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA    180
AAAAGTAGAA GCTCAAAAAC TCGAG                                         205
```

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```
GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT    60
AGCTCTCTGG AATTTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC    120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG    180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA    240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA    300
TCCCAGTTCA CAAAGCCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT    360
CCAAGTGAAG CATCAGAACT TCTCGAG                                         387
```

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```
GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT    60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA    120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCATTTTCC AGCTGTATGT ATCCTCAAAC    180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT    240
GAAAATTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA    300
CATTGCACAT CTGAATTGTA ATTCGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT    360
GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC    420
CGGATCCCAG GCAGGACAGT GGCTAGGCTG CGTGTCCTCA CCCCCGACCC TCGTTTGACC    480
CCTGGGAGCC GGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG    540
CAGAGGCTGC GGG                                         553
```

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```
GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTG      60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTTAACTA TGCTATGAAG TAGGAAAAC      120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTTAAGTT GAGGGTTAGC AATGATGAAT      180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTCTTGA GAATTACTGG TAGTTGTGCA      240
CAACTAGAGG GTATTTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAAATAC      300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA      360
GTTTAGAGGG GATCGTCCTC TTCTTAATGA GTCTGTAAGT TACAAAAATA ACTTTTTTCT      420
TTATTTACTA ACTGGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG              472
```

(2) INFORMATION FOR SEQ ID NO:397:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 548 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```
GAATTCGGCC AAAGAGGCCT AGATTGGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA      60
TTAGTGGATA TTAAGTAATT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA      120
CCATGAAGTC TTCACTTAAT TTAGGAGAAA TGGGGAATAT TTTCTATCAT TCCTGATAAC      180
AGAACTAGAT ATTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC      240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTTAGT AGCACAGGCT ACCAAAAAAT      300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAAT      360
GAAACATACA TGACACAACCT GGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT      420
ATTAGGTAGA AACTAAAGG AAATGTATTC CAAGCAAAAG TGGCAAGGGA ATTTACAGA      480
ACTAATTTTT TAAGGGAGGT AATAAAAGCA GCAGTTAAAA TGCATGTCCA TGTATCAGAT      540
TCCTGGAG                                     548
```

(2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```
GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTTC TGAAGACAGC      60
AGATTTATCA CTGTTAATCC AGCGGAAAAA AACACCTCTG GAATGATAAG CCGCCCTGCT      120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC      180
CTCATCCACT TCTCAAACCT GGAGAACTGC AAGGAGCTGC AGCTGGAGAA GCACAAGGGC      240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC      300
```



```

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCCCCTCGG GGAAGCTGAG CATCGGGGAC 360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC 420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG 462

```

## (2) INFORMATION FOR SEQ ID NO:399:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TGCGAGGAAT AGAAATGCTT 60
GCATACTCTT GATTTTTTTT TTTTTTTTGT GTGTAAAAAA CACACCCTCC CCTCCCACCC 120
CAAAAAACAT CAAATTCCTT CCTTTTCCCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC 180
CTTCCCAAT CTGTCCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA 240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTC CAAACTAGG 300
TCTTCTATGC TGTGTCAAAA AAAGTTTCCT ACAGACTGAG GATATTCACA CGACAGGAGC 360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGAA GCGGTGGCC 420
CTACAAAA 462

```

## (2) INFORMATION FOR SEQ ID NO:400:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACTGGT GTCTGATTGG 60
TTGTCATACT TTTCATTTTC CCTCCTTCA GATCCAATCC ATTCTACACA TTACTGAT 120
TTTTTCCTAG TGTACTGATT TCTGTTATGT CACTTTGCTG CTAGGCTTC TTAATGCTTA 180
CTGTATCAGG TGTAACACC TTTTGCTTAC CTTTCCAGGC CTTTTTAGAG TCTTATATAG 240
CTTACTCCCA TGCTCCACT CCCCTCGAG 269

```

## (2) INFORMATION FOR SEQ ID NO:401:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATTT 60
TCCATTTTTA TTTCATTTT TAATTGCCCA GAGCCTAATT TCTGTGGGCC TCTGCTGATT 120
TGCACATTTG AGATTCGTGT GTAAATATGC GTGTGGCATG TGTACACGCC TGGGCCTCCT 180
TATCACAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG 236

```

## (2) INFORMATION FOR SEQ ID NO:402:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCAA TAGTTTTGTG	60
CTTCAAACAA AGTTTGGGTA CATTTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC	120
ACCCATGTGG ACAATCTCTG GTTGTGTTGCG ATCACTGTTG TTGCTGAGTC TGAATGTGAG	180
GAACATGCCA TTGGCATGTC TTGCCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT	240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG	292

## (2) INFORMATION FOR SEQ ID NO:403:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT	60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTTCCATC	120
TGACTTTTATT TCCAAATACA CTTTCTTTT TAAAAACCA ATACACTTTC TTTGAGGATG	180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT	240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAAC TAACA	300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG	345

## (2) INFORMATION FOR SEQ ID NO:404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC	60
TGCTTACAAG ATTATCTTGA AAAAATGTGC TGGGGAGTAT GGTATAATGA ATTACGGGTC	120
CAAGAATTTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTTAGCAAAG	180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC	240
CCATCACTCG AG	252

## (2) INFORMATION FOR SEQ ID NO:405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```
GAATTCGGCC TTCATGGCCT AAGAATACGA AATTTGAGAG GATGAATTTG ACCTTTAATA    60
TTGTTGGACT TTGTATTGGA TATCTTTCCT CCATCACTTC AAAATCGTCT TGCTTGGCCT    120
CTTATTGCAA CCACAGCTGC AGTAGACAGT TCCATACAAG CTTCCAAGAA CTTTCATGGGT    180
ACATCTGGAG AGCACCTCAC CTGGGGCCAC ATTCTCTACC TTTCTGTCT TACTCTTCCT    240
CCTCTGGGCT TCTTTCTGGT GCATGGGGGT GGGGGGAGAT ATTAAGTATT CCCCACAGC    300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```
GAATTCGGCC TTCATGGCCT ACACAGCAAC AACCAACATA GCTAATACAG AAAGCAGTCA    60
GCAGACTCTA CAGAATTCCC AGTTTCTTTT AACAGGTTG AATGATCCTA AAATGTCTGA    120
AACGGAGCGC CAGTCCATGG AAAGCGAGCG TGCAGACCGC AGCCTGTTTG TCCAAGAGCT    180
CCTTCTGTCC ACTTTAGTGC GTGAAGAGAG CTCATCCTCA GATGAGGATG ATCGGGGGGA    240
GGTTCTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```
GAATTCGGCC TTCATGGCCT AAAAGAACT AGGTGTGATT GGAAGGAAGA ATCATGAAAG    60
ATCAGGGTAG ATACTGGTGG GGCAGCTATT AAAGGAGTTT GAGCAGGGGC ATGACATCTT    120
CACATTGAAA GCAATATGGG AGTCGAATTA AATTTAGTAC CCAGTTGAGA TAAAAGTCCA    180
TTGCCATATT CACAGTGAGG TGGGACAAAA GCAGAGTCAG AGAGATTAAAG AGGCTGGGAA    240
AGATTGAAGT GATTTTtagg AATCAGAATC CACATCAGTT GATGACAAGT ACAGAAGGGC    300
ACAATAGCAA GAAGAAGAAG TAAATGATAA TTCCTAGATG CCATTAGTCA CAATCAAGTA    360
CGGAAGAGAC ATTATTGACT GAGGTTGAAT CAGGGCAGAG AAGATAATAT ACCTGATTTT    420
GGAAGTGTTG CATGTAAGGG GGCTTCGATT TCAGCTACTT ACATACTTGG GAAGTCTCGA    480
G                                     481
```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

GAATTCGGCT TCATGGCCTA CCCGGCAATT GGCTGATCCG CAGAAACATT TCTGGGCTTC	60
TTTTCCATAT CTCTGGAAC TATAGTCAAA CGTTAACTCT GAGCCTGAAG GAACCAGTTT	120
GGTGGTAAAA AACCCAACCC TCAGTTGTCC GTTCACAGTC CATTTTTGGG TTTCACAATT	180
TGGTTCACAG CTGTGATTCA TGAAACGAGA GCAATTTCCT TTTTGAGTGG CATCTATTAT	240
CTCATCATTC TTCAGGGCCA TGAAATAGTA ATGGATGTTT TTGTTTCGTG CATACTCCTT	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC TTCATGGCCT ACAATGAGGA TAATACAAA GAGCAATCTG CCCACTGTG	60
AGCCTGAGCT TCCCATACTG ACTTCTCTCT CTCCAGAGGG ATCCACTCCT ACCAGTCTGG	120
AAAGCACTGG GCATACAAGC GCACAAATGC GTGGCACATA CTACAAATCC TTCTAAAGCC	180
ACTGCTGTAC ACCTGCCTCA CTTAACCATG CAGCCTCAAG GCTGTCTCAT GTCATTCTTT	240
CCTACAGCTG CAGAGTTTTC AACATATGGA CAGGTGTGCC AGGATTATT TGACTAGTCT	300
CTTACTGATC TAGCTCACCT CCTAAATACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GAATTCGGCC TTCATGGCCT AAAATGTGGG GATTGGGAAC CACTAGTTCT TTCAGATGGT	60
ATTCTTCAGA CTATAGAAGG AGCTTCCAGT TGAATTCACC AGTGGACAAA ATGAGGAAAA	120
CAGGTGAACA AGCTTTTCT GTATTACAT ACAAAGTCAG ATCAGTTATG GGACAATAGT	180
ATTGAATAGA TTTCAGCTTT ATGCTGGAGT AACTGGCATG TGAGCAAAC GTGTTGGCGT	240
GGGGTGGAG GGGTGAGGTG GCGCTAAGC CTTTTTTTAA GATTTTTCAG GTACCCCTCA	300
CTAAAGGCAC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCGGCC	TTCATGGCCT	ACCTGAACCC	CTTACTTCGA	AGGATCATAA	GATTCACAGG	60
GGTGTTTGCA	TTTGGACTTT	TTGCTACTGA	CATTTTGTGTA	AACGCCGGAC	AAGTGGTCAC	120
TGGGCACTTA	ACGCCATACT	TCCTGACTGT	GTGCAAGCCA	AACTACACCA	GTGCAGACTG	180
CCAAGCGCAC	CACCAGTTTA	TAAACAATGG	GAACATTTGT	ACTGGGGACC	TGGAAGTGAT	240
AGAAAAGGCT	CGGAGATCCT	TTCCCTCCAA	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCGGCC	TCATGGCCTA	GTGGTAGGGC	TGAATTCGCA	CTATAGGGTT	AGATTTTCTA	60
CTGTAGGGTT	AGATTTTTTT	AATGGTGTGT	ATATAATAAT	ATAATATTAA	TAATAATCGG	120
AGAGGGTCAA	AGAGGAGGGA	AACTGGGTAA	CCCCAAAACA	TAAGGTCGAG	GTCCCTGTTC	180
TTCACCGGAA	AGAGGGTCAA	GGACCAAAGC	CATAGATTTG	ACTGGTAGTT	TAGTTTAGTC	240
CTGTCTACGA	AGAAGAAGAG	CGGTGTGTTG	TTTAAACAGA	TTCAAGAGCA	GGAAGCACTC	300
ATTTAGATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCTAGA	CCTGCCTCGA	GTCAGGCTTT	TAAAAACAAT	CTCATCTGTC	CCTCTAAAAA	60
TTAGCTTCCT	TTAGAACCTC	TTTCCTTGG	CAATATATTA	GTGATACTAT	TGTTATCTTC	120
ACACTAAAGA	TTCAAACTT	TAGTTTTTGT	TTTAGGAAAG	TTTTTTATTT	TTACATTTCT	180
TTTCATCCTC	ATAATTACCC	AGTCATCATG	AAC TTGTAG	TTATCTATTT	CTTCATAGGA	240
ATCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAC	TAGGGACCGA	AGGGAAGTAA	GAGACTCCAG	AGACATGCGG	GACTCAAGGG	60
AGATGAGAGA	TTATAGCAGA	GATACCAAAG	AGAGCCGTGA	TCCCAGAGAT	TCTCGGTCCA	120
CTCGTGATGC	CCATGACTAC	AGGGACCGTG	AAGGTCGAGA	TACTCATCGA	AAGGAGGATA	180
CATATCCAGA	AGAATCCCGG	AGTTATGGCC	GAAACCATT	GAGAGAAGAA	AGTTCTCGTA	240
CGGAAATAAG	GAATGAGTCC	AGAAATGAGT	CTCGAAGTGA	AATTAGAAAT	GACCGAATGG	300
GCCGAAGTAG	GGGGAGGGTT	CCTGAGTTAC	CTGAAAAGGG	TAGGCTCGAG		350

## (2) INFORMATION FOR SEQ ID NO:415:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCGGCC	TTCATGGCGT	TAAAACTGTG	CCTAACAGAG	GTGTCCTCTG	ACTTTTCTTC	60
TGCAAGCTCC	ATGTTTTCAC	ATCTTCCCTT	TGACTGTGTC	CTGCTGCTGC	TGCTGCTACT	120
ACTTACAAGG	TCCTCAGAAG	TGGAATACAG	AGCGGAGGTC	GGTCAGAATG	CCTATCTGCC	180
CTGCTTCTAC	ACCCAGCCCG	CCCCAGGGAA	CCTCGTGCCC	GTCTGTGGG	GCAAAGGAGC	240
CTGTCCTGTG	TTTGAATGTG	GCAACGTGGT	GCTCAGGACT	GATGAAAGGG	ATGTGAATTA	300
TTGGACATCC	AGATACTGGC	TAAATGGGGA	TTTCCGCAAA	GGAGATGTGT	CCCTGACCAT	360
AGAGAATGTG	ACTCTAGCAG	ACAGTGGGAT	CTACTGCTGC	CGGATCCAAA	TCCCAGGCAT	420
AATGAATGAT	GAAAAATTTA	ACCTGAAGTT	GGTCATCAAA	CCAGCCAAGG	TCACCCCTGC	480
ACCGACTCTG	CAGAGAGACT	TCACTGCAGC	CTTTCCAAGG	ATGCTCGAG		529

## (2) INFORMATION FOR SEQ ID NO:416:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC	TTCATGGCCT	ACTGAGCCTA	GTAATTCAAG	GCTGCAGTGA	GCTGCGATCA	60
CATCACTGCA	TTCCCGCCTG	GGCAACAGAA	GTAGACTCCA	TCTCTAAAAA	GAAGGAAAGA	120
AAAAAAGGAA	GAAATATACA	GTAATTTTAA	ACTGGGAGAT	GAAATGCTAA	TTTCTAGAAG	180
TCCATTTGGT	TTTGAAGGGT	CTCATGTCAA	AAAAAAAAAA	AAGTAAGTAA	AATAAGACCC	240
ATCCTACTGT	TTTATATACT	AAAATAGTAA	GTAAATTAAA	TGAAAATGAA	GTACATTGG	300
GCTTTCATTT	ACCAATCCTG	GAATGTTGAA	AAGTTGCCCA	AAAGACATTT	AGCAAGACTC	360
GAG						363

## (2) INFORMATION FOR SEQ ID NO:417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAAG CGCCGGTAGA	60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAACC CGGATCAACC	120
TGCCTCGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTTGT	120
TGTTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG	180
GTTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTTC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGCTCA GATGGGTTGA GGCAGCTGCT TCACAACAGG ATCAGAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA	120

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT	180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAATATGTG GACACAGACT TGCCAGGCAG	240
CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCAGCC CGGTGGCGCT	300
CGAG	304

## (2) INFORMATION FOR SEQ ID NO:421:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAACTGAAG GAGTCTGGAA AGCAGCACGG	60
CTTTGCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCCT GTAACATGAG	120
TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCTT	180
GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA	240
CCAGAGACAA CTCGAG	256

## (2) INFORMATION FOR SEQ ID NO:422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA	60
GTTCCAAATG GAATGAAGGA CAGTTCGTGTT TCTCTTCAGG ATGCAGAAATG GTACTGGGGG	120
GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG	180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG	216

## (2) INFORMATION FOR SEQ ID NO:423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA	60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG	120
AAAAGGTGGA ATTCTGGGCT GGCTTTCCTT CACCAGAGGG TATCCCAAAT CTATGACAAA	180
AGAAAAATGC CAGTCTCTTT TGGAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG	240
CAAGCCTCCA TCTTCCCGG GGAAATTGA AACCAAGATG GGGTCCTGTC AATGACCCTC	300
TAGCATTTAT TGAGTGCTTA TTAGACAGGT GGCCTTGGGC TTTGAAATGC AATATCTTAT	360
TTAACTTAAT TCTGAGAACG TATCTCGAG	389



## (2) INFORMATION FOR SEQ ID NO:424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTTATTAG AAAATGTCCC      120
ACCCAGGACA GAGAATGAGC TCCTTCGAAT GTTCTCCGG CAGCAGGATG AGATTGACG      180
GTTGAAAGAG GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC AACAGCCCCA AGAACTGTTA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG GAGTGGGGGC CAGCCTGAGG ACCCCGCCT ACCACCTCGA G      411

```

## (2) INFORMATION FOR SEQ ID NO:425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTC AACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGCG GGGGTCCTCA      300
TGGGCCTGCT CTTGGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TCGTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CTTCCACCT GGTGCGGTGA GCGCGCCCGC      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCCGAA CTNATCTCCT      600
GCCTGCAGGC CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC GCCCCAACC CAAGGCTCGA G      691

```

## (2) INFORMATION FOR SEQ ID NO:426:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAAACAA AGCTCTTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

```

```

GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA      180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT      240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCTGAAT CCAGGCGAGA AGTTCCCCTG      300
TATACAGATT CTGAACTCGA G                                     321

```

## (2) INFORMATION FOR SEQ ID NO:427:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTTAT      60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTTCT      120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTACTACT GGGTGGCAGG      180
TGGGCTCGAG                                     190

```

## (2) INFORMATION FOR SEQ ID NO:428:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 670 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG      60
CTGCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAAACA GAACTGATCT      120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG      180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC      240
CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT      300
GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCCTG AGGCATGGGA      360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCCAA AGGCCCAAAG      420
AGGGCCGTGG GGCCTGAGGA GGTCAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC      480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC      540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCTTC AGGGAGCAGA GCAGAGCAGG      600
TGGTGGACGG GCCCAGTGCT GGGTGTTC ACCACCATCC CCCCATCCCC CATCTAAGTC      660
GCTCCTCGAG                                     670

```

## (2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

GTAAGGATTG GCGATTCCTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT	60
ATGGCTGGCC TGGTTTGTTT CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG	120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCCAT GGGCAGATGC	180
TGGGGGAGGA GGCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCTGCAA	240
CATCCTCCTT TTCCTTGCT TCCCTCCCA ACCTCGAG	278

## (2) INFORMATION FOR SEQ ID NO:430:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTTAAATGCT	60
GTTTTCTCTG TTCAAAATGC CCTTTCCTAC CTTATCTACT TGTGCCACTG CATATTCCTA	120
AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGCTCTG ATCATCCTGG CCCCTCTGGC	180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA	240
CCCCGCTGAA TTGGCATTAT GGGCAGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG	299

## (2) INFORMATION FOR SEQ ID NO:431:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GTTACATGAC ACTGTTAATG ATTGCATTTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA	60
AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCTT GTCAAGCACA CCCCTCGTGT	120
CCAGGTTCTT CATGGGCAGT GCTCGGGGTG ACAAAGAAGG CGACATTGAC TACAGCACCG	180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCTATG	240
CGACTCTCAT ACAGGCGGGC GCCAGTGCAT CTTCTAGCAT TGTCGTGGAA GTTCTCCGAA	300
TCCTGGTTTT GATTGGTCAG ATTCTTTTTT CACTAGCGGC GGCTCTCGAG	350

## (2) INFORMATION FOR SEQ ID NO:432:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

GAATTCGGCC TTCATGGCCT ACCAGGTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG	60
GGATTATACT CTGCACGCTG CCATCCCACC TCTCGAAGAG GTTTATTCCC TGACAGAGCT	120
CAAGGCCCGC ATCAGCCAGT CAACCAAAAC CTTACCCCT TGTGAACGGC TGGAGAAGAG	180
GCGGACGAGC TTCCTAGAGG GGACCCTGAG GCGGAGCTC CGGACAGGAT CCGTGGTCCG	240

GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300  
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 273 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT 60  
 TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACGTGCC ATGTCACCAT CTCCTCCTC 120  
 CTTTGGAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCCACAAGC TGAAGTGTGG 180  
 CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCATT CCTGGTATGT 240  
 GCCATTGGGT TGGATGTCCC CACTTATCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 324 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GGCGGGACAG TGCTTGTGAA ACTGAACACA ACAAAGTAT GGATATGGGA 60  
 AACCAACATC CTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120  
 CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180  
 ATTCTAACAA AACAGCTTTT TGAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240  
 CAGCAAGCTA GGAAGCGGCG AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300  
 AATGCAAACT ACCCACACCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:435:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 548 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTTGGCTT ACATATTTTG CAACAGTGGT 60  
 ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120  
 CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTCC TACACATCCT TCCCGATGGA 180  
 AGAAGGGGTT GGCCAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240  
 TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG 300  
 TTATTGTGAT GCTTACTGCT GCTCTCCACG CGTTCAGTTC ATGTGTTCATG TGCAAAGGTG 360  
 CTGCTGAAGA ATTTCAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

AGGTATTTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG	480
TAACGTCAGT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA	540
GTCTCGAG	548

## (2) INFORMATION FOR SEQ ID NO:436:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 308 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGGCCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT	60
TTATTCTGAG CTGTCTTCAC TTTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG	120
TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT	180
GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAATCTAA	240
CTGCCACCAT CCTGGAGACA TTTTGCAGGG CTTTCCTTTC AAGTCTTTCA AGTACAGGAC	300
ATCTCGAG	308

## (2) INFORMATION FOR SEQ ID NO:437:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCCTCG GCCCCCAGCG CATATGACCA AAGTCACACC AGGTTTCAGAG	60
CTGCCCCTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT	120
GATGTGCCCC CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCACTCCC	180
TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CCTTACTGAT	240
CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA	300
GGTGTTCCTG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA	360
TCTGTGGAGT CCATCCCTGA AGTGTAGAG GAGTGCACGT CCCCTGCCGA CCAACTCGAG	420

## (2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 279 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC	60
AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG	120
CTGCGTGTGG TGAAGAGCC GTACACGGTG CGTAGGGCCC GCATCCACGT GCGCCATGTC	180
CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGGTTGA CTGCAACTCC	240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

## (2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 351 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCA	CCCAGCCTTC	TTCTTTTCAT	60
TATAACCTTT	ATACCACAGT	AAGCTGTTGC	ATCATTCAAA	TGACTCTGCA	TCCTATATTG	120
AATATTCTCC	ATTATTCTCT	AATATCTTTG	GGGGTACCCA	GGATTACAGG	GTTCTGGGCA	180
TACATGTTAA	TGCTTTTGCC	AGGACTTTTC	TTTTTATTCA	TTGTCGTGAC	CCATTGTCTT	240
TGCTTATATT	TAAAGTTTTT	GCTCTTGATA	TCATTGGTTC	TTTCCTAAGT	CACTTTTCCT	300
GGTAACTGCT	TTGGAATGAA	TCATACATAT	CTCACTTACG	GAGCTCTCGA	G	351

## (2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 412 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

GAATTCGGCC	TTCATGGCCT	ACCAATACTC	ATAATTAAAA	GTTTTTCGTT	GTCAAAACAT	60
TTTCACAGTT	CAGGAATCAC	AGTCCTATTT	CATCTTTTGA	AATAAAAGTT	AAAGTCCATT	120
TTTCTTAAGC	CTTATTATAC	CATTATCCAA	AAACACTACC	TAGCATTTCAT	CTTAGTTTTT	180
CATATCTCCT	TAGCAGATAG	TTTAGTATAT	TCCATTGTGC	TTATTGAGG	TTTAAAAAAA	240
GTTGTGGAAG	AAGTTTCTCA	GGAGTTCAGC	AAGCCTTTCC	ATCTATCTTC	TATTTTAAAA	300
GAATGTGATT	TATTGTTTTT	ATGAATAAAA	TATACCTCGT	GTGTTTCTCA	TATGATGTTT	360
CATTACATTA	ATCATCCATT	AAGTAAATGT	TTTGTGCTG	CAAAAACTCG	AG	412

## (2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 292 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC	TTCATGCCTA	GCCAGGAGGA	GGAGGACCCT	ATGAACAAAC	TCAAGGGCCA	60
GAAGATCGTG	TCCTGCCGCA	TCTGCAAGGG	CGACCACTGG	ACCACCCGCT	GCCCCTACAA	120
GGATACGCTG	GGGCCCATGC	AGAAGGAGCT	GGCCGAGCAG	CTGGGCCTGT	CTACTGGCGA	180
GAAGGAGAAG	CTGCCGGGAG	AGCTAGAGCC	GGTGCAAGCC	ACGCAGAACA	AGACAGGGAA	240
GTATGTGCCG	CCGAGCCTGC	GCGACGGGGC	CAGCCGCCGC	GGGGAACCTG	AG	292

## (2) INFORMATION FOR SEQ ID NO:442:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```

GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCTGGT    60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCCCCCGACA GCCAGGCCTG    120
GGTTTGTCTT TTTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA    180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCC TTAGGCTCG AG                        222

```

## (2) INFORMATION FOR SEQ ID NO:443:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```

CTTTATGACA GCCATGAGCT TTTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT    60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTTGGA TTTTGTGAT    120
TTTGACCAGT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA    180
GTGCTTTGAG CCCCCACTAC TCGAG                                         205

```

## (2) INFORMATION FOR SEQ ID NO:444:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTTGCTCTGC TAACTCAACT    60
CTGCCTTCCT CTTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG    120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG      178

```

## (2) INFORMATION FOR SEQ ID NO:445:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGAAAGCCAC AAACCTTTTA GTTTTAACT TCAAAGGCTT      60
CTTTCTCTTT AAAAAAATT ATTTTAAATA TAGAGTCAAA AAATTGGATG TATTATTTTG      120
AGCTTCTAAT TGCTGCCACT TGGAGATGTC CAAGTAAGAA GGCCTTCTTT TTACATGGGA      180
TGAATTGTGC ACTTCTACTG ATGATGACTA CAGCAGAAGT GATGTTATAC GTACAGGCAC      240
TTGAATCGA G                                                              251

```

## (2) INFORMATION FOR SEQ ID NO:446:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GAATTCGGCC TTCATGGCCT AGGGCTTATA TTTTAACTGA ACTATTATTA AATAAAAACA      60
AAATAAAATC TTATCATATA GGTGTAATCT GTTCTAAGGA AAAAATCCTT CTATCAAGAC      120
TAAACGTCTA ACTGAATACA GAATGACATT TCATGCCTTA AGGTCTCTGT CCATGTTGTT      180
CCTTCTTTCT ACTGTCCCTT ACTGTATTAG TTCAAAACAT TCTAATTCAC TCTCCAAAC      240
CCAATTCAAA CATCACCATC AGAAAGTCTT CCATGATGGG CCAGGTGTGG CGGCCCTCGA      300
G                                                              301

```

## (2) INFORMATION FOR SEQ ID NO:447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAATTCGGCC TTCATGGCCT AGCTGAAATG CTTTCTATTG GATACTATCT GGGCATATTA      60
CTTCCTGTGG TTAAGTGTCT GGGTGACAGG ATTCATAGAA GCCCAAACCT TAGCACCACG      120
CAGCATACCC TTGTAACAAA GCCACTCGAG                                     150

```

## (2) INFORMATION FOR SEQ ID NO:448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AATTGATTT TATTAGGTTT AAATTGTATT TCTTCAAATT      60
TCATAAACTA TAGCATTTAT CTCCATATTT TTAATAAATG ATCACAAATA AATCACTGTT      120
AATATCTCCA TTTACTTTT TACAACCTCT GCTATTGCTG GATTTTTCAT CCTATGATAT      180

```



GTAAACCAA TTAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 453 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC TTCATGGCCT AAGACTGGGG GCATGTACCC CACCTACTTT CTGCACCTGG	60
ACCGTGAGGA TGGGAAGAAG GTAAGGTTGG TCTGGGCATG TTATCATCTA GGCTTTACAG	120
CCCTTTGAAA TCCTAGGGGC TGAAATGTGA CTGGAAGTCT CATATCTACC GCTGACCTCT	180
CAGTTCCTCA AAGAACTGC CTTCTGTCT GGTCTGTGCA CATCTTTGTG TTTTCCAGTG	240
CATTGTGTG TGTGCACATA TGTGCGTTTG GGAGCTGACG CAACGGAGAG AGTCTGTGTG	300
AGTGGCTCTC ATGACTGTGT GCAGACCAGA GGCTGAGTCT GGAATATGAC CTCATTCCAC	360
TCCCCAAGGT GTTCCTCTG GCGGGAAGGA AGAGAAAGAA GAGTAAAACT TCCAATTACC	420
TCATCTCTGT GGACCCACA GACTTGCTC GAG	453

(2) INFORMATION FOR SEQ ID NO:450:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 246 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC TTCATGGCCT AAAAGCAAAT TAACTTGTTT TGAAGAGAAA GTATAGATTA	60
ATTTTGTGTT CTGTTTAAAT TTTATCTCCT TGGTAAAGAT TTTTGTGTTT TGGGCAGAAA	120
ACTTGGCATT TTTAGGCGTA GATACCTTAC CTTACAATGC CAAAATGAAT TTAATTCAG	180
TACTCAGGTT TTTCCCTTTA ACAGACTCTA TGTGTACCAG GCATTGAATT CTAGACCTGC	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:451:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 414 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC TTCATGGCCT AGTTTGGTGG GGTGAAGTT GATGGCAAAC TCATGGGAGA	60
CCTTCCAGTC TGGGGGTAAC TGGGCCCCGA ATCCCAGAGC TGGAAACATC TTATCACTGT	120
CGTAGTCCTG AATGATCTGC CCAACAGCCC AGATGGCCGA CAGATATTCG TTGGTGCCCA	180
TAGGGTTGAT ATAGTGCAA GAGGAAGGGT CGAGGGGATT CCCGTGGAG GCTGTAAAGT	240
CTATTCCAAC GGTGAACATG AGCTGGCAGC CTCCCAGGAT GTAGTCAAGG AAGGAGTAGT	300
CTCGGTTTAT CTTGCAGGAT CGCAGGATGA TGATGCCCGA GTTTTATAG TTCTTCTTCT	360

TCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG 414

(2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 374 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC TTCATGGCCT ACACACTGAC TGACAGACCA CGGTATGCCT TGCACCACCC	60
TGGCTGCTGG GGTCCAAAGA GGGATCTGGT AGACCTGGGC TGGAACTCA GCTTCACCAT	120
TTACCATCTG GGTGGCCAAT GGAGTGTTAC TTGGCCTCTC TGAGCCTCGG TTTTGCTCGT	180
CTCTGAAACA GTAAGATACC TCCCTTTGGC TGTGTGATG AGGATGAAGG TTAGCCTATG	240
CCCAGTAGTA TGCCTGTCCC TTCATCGATG CCTGCTCATC TCACTCTTGC TCTGAAAACA	300
CCCCTAGTAG AGGCGCAGAG GGGCAGGGCC CACCCACCC ACCAAAACGT GGTGCAGAAT	360
GAGGTGATCT CGAG	374

(2) INFORMATION FOR SEQ ID NO:453:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 288 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GGGTCCGTCC GCCGCCACCA CCCACTCCGG ACACAGAACA TCCAGTCATG GATAAAAATG	60
AGCTGGTTCA GAAGGCCAAA CTGGCCGAGC AGGCTGAGCG ATATGATGAC ATGGCAGCCT	120
GCAATGAAGTC TGTAAGTACG CAAGGAGCTG AATTATCCAA TGAGGAGAGG AATCTTCTCT	180
CAGTTGCTTA TAAAAATGTT GTAGGAGCCC GTAGGTCATC TTGGAGGGTC GTCTCAAGTA	240
TTGAACAAAA GACGGAAGGT GCTGAGAAAA AACAGCAGAT GGCTCGAG	288

(2) INFORMATION FOR SEQ ID NO:454:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 383 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC TTCATGGCCT AAGAAGTGTC TCCTGTATCC ACCTCTTCCT GGCCTCCCTT	60
CCCCCACTTC CTGGTCCCTG TCCACTCCTC AGGTGGGTGC TCTCACTTCT TGAAAGCTCT	120
AGGCACCCCC GCCTCCCGCC AGGCTCCCCG TTGGCTCCTG GCAGGCCAGC TGAGAATGAA	180
CAGGAGATGG AGGCAGGCAG CCCAGGCTGC AGAGGTGAGG GATGTGGGCG CAGGCCCAGA	240
GGGCTCAGCC TAGAGGCTTC CAATCTCAGA TTCTCTGCC TGTGGTCATC TGTGTGTTCA	300
TCACCCAGG ACAGGGCAGA CAGAGGGGCA AAGCACTGGG GGCCCCAGAG CCTAGCTTCC	360
CCTCAGCCTG GGGGAACTC GAG	383

## (2) INFORMATION FOR SEQ ID NO:455:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAATCACA GTACCTTAA TACGGCCCA GAAATCTCGAG      409

```

## (2) INFORMATION FOR SEQ ID NO:456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTCATG AAAACAAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTTT TGAGCAATGT CTCTTTGGT TACAAAGTAA AAGGTAAAT      120
AAAAGTTTAA AAGCATTGGG AAAGAATGTT CTTTGGTTTT TTTACTCAGT AACCTAAAGT      180
TTAATGACCC TTACAGTGC TGATAAACAC TTAAATTTTT GCAGTAGGCA TTGCTAGTTC      240
AAATTGAAGG AAGGTTGCCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

## (2) INFORMATION FOR SEQ ID NO:457:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCCTA CTGCTCTTG GCTAAGGTGG CAGTGTACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTTGGCCATA ATAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAAACAC TAAAACTAC CTAAACACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTTAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACACTT ATTTTCTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTAT TTTGCCTGAA ATTGGCTTAA AGAAAGTCTC      480

```

ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

## (2) INFORMATION FOR SEQ ID NO:458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCC TTCATGGCCT AGCGGAAACA ACTGAAACTA ATGGAAGATA TGGATACAGT      60
AATTAAACCC CGTCCTCAAG TAGTAAAACA AAAAAACAG CGACCAAAAT CTATTACAG      120
AGATCATATT GAATCCCCCA AAACACCAAT AAAGGGTCCT CCAGTCTCTA GCCTTTCTTT      180
GGCATCGCTG AACACGGGTG ATAACGAGAG TGTACATTCA GGCAAGAGGA CGCCAAGATC      240
AGAGTCTGTA GAAGGCTTCT TATCTCCAAG TCGTTGTGGC AGTCGAAATG GAGAAAAGA      300
CTGGGAGAAT GCATCAACAA CTTCTTCAGT GGCTTCTGGA ACAGAATATA CAGGACCAA      360
GCTCTACAAA GAACACCTCG AG                                     382

```

## (2) INFORMATION FOR SEQ ID NO:459:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```

GAATTCGGCC TTCATGGCCT ACTGAGTCCC AGGCCGGGGC CCTGCCCCAG CCAGGGCTGG      60
GACTCTGCAG TTGGGAGCTT GTCCAGCTGC CCCCTCTAAT GCTTTTCTCC TCCAGGACAC      120
AGGGAGCCTC CGGAAGCACA GTAGTCCCCG TGTGTCACCT TAGGCTGACC TCTGTCCCCA      180
GGGGTGACGT AATGCTGTCA CTGTCTTGAA TTCTTCATCG TTTAACAGGG AGCCCACTGT      240
TTTACCAAAA AGCAGAATTG GATTTTTTTT TTAAGTCGAT AAATTTTAC TCAAGGAATT      300
CCATGTTGTG ATTTCTTCCA CTGTCCATCA AGGTCACTT AGATCCTCTA AAGAGCTAGA      360
GTCAAAAGAT TTATCTTCAA GTTAGTCCTT TTTAATGAAA CCGATGCTTA TTTAATCCA      420
GTCAGCCCTC GAG                                     433

```

## (2) INFORMATION FOR SEQ ID NO:460:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```

GTCCGGCTAA AGTAATCCAG TCACCTGCTG CTGATACTAG AAGGGCTGAG ATGTCACAAA      60
CAAATTTTAC CCTTGACACT CTTGCCCAGA ATGAAGGGAA GGCTATGTCT TATCAGTGTA      120
GCCTTTGTAA GTTTCTATCA TCATCCTTTT CCGTGTAAA AGATCATATT AAGCAACATG      180
GTCAGCAAAA TGAAGTGATA CTGATGTGCT CAGAGTGCCA TATTACATCT AGAAGCCAGG      240

```

AGGAACTTGA AGCCACGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300  
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 563 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60  
 TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAG 120  
 AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180  
 CTAAGATAAA GTGTGAACAG CTTAATTTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240  
 AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300  
 AAGAGAGCAA AACCAAAATA GAAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360  
 CAGAAAGGGC AGGGACAAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTCGAAG 420  
 AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480  
 CTGATGTTGA TGGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540  
 TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 477 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTGAGGTGT TGCCTGTCAT TCTTCTGCTT 60  
 CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGGCG GACCGGCAAC CGTAGCTGCT 120  
 GCGGACCGGT CCAAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTTGGA 180  
 AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTTG ATGGAGAACC TTGTGACCTG 240  
 TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300  
 AAGGCAGAAG AAGTAGAGTT GTATTTGGAA AAACCTAAGG AAAAAAGAGG CTTGTCTGGG 360  
 AAATATCAAA CATCATCAAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420  
 TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTtaggag AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 382 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GTTGCACTCC	TGTTGTACTC	TTTGTAGAGT	GGAAAAGAGG	TGGATACTGA	GATCTAAGAG	60
GAAAGGATAG	TCATTACAGT	TCTGAGATAT	GCGCTCTCTC	TATTGTTCTC	GAACACAAAG	120
GGATAGTCTC	TTTTCTGGAG	CTGATGTCCC	TGCTTGGAGG	TTAGCCCCAA	AACATGGCTC	180
TTGTATTGTT	CTAAGAGAAA	AGGCTTTCAT	TTTGGTTCTT	CTGATTGGTG	TTACCTACTG	240
CCTAATATGT	GTTTCATTTT	TGACAGAGAG	GCAGACTATT	GAAAAAGTCT	GTGTGAACAG	300
AGAGCAGTTC	ATTAAGCCCA	TTGCTTTCAG	TAATGTGGCC	TTGACCCCTT	CTGCTTCCCC	360
CTTCTCCCAT	GACGAGCTCG	AG				382

## (2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GGACCTGCCT	CAAGGACATG	GGTGGACATA	TGGGCGGACT	CTCAGGGACA	ACCAAAGTGA	60
TGATCACACT	GACCGATGTC	AATGACAACC	CACCAAAGTT	TCCGCAGAGC	GTATACGAGA	120
TGTCGTGTTC	AGAAGCAGCC	GTCCCTGGGG	AGGAAGTAGG	AAGAGTGAAA	GCTAAAGATC	180
CAGACATTGG	AGAAAATGGC	TTAGTCACAT	ACAATATTGT	TGATGGAGAT	GGTATGGAAT	240
CATTTGAAAT	CACAACGGAC	TCTAAAACAC	TCGAG			275

## (2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 488 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

GTTCTAGACC	TACCCCGAAC	AGCCCCAAAC	AGTCAGAGTG	GCACAAAATG	ACAGTCTCCA	60
AAAAGTGCCC	CGACCAAGAT	CTCAAATCA	AACCTTGCTGT	CCGAATGGAT	AAGCCTCAAA	120
ACATGAAGCA	TTCTGGGTAT	TTATGGGCCA	TCGGTAAGAA	TGTCTGGAAG	AGATGGAAGA	180
AAAGGTTTTT	TGTATTGGTG	CAGGTCAGTC	AGTACACGTT	TGCCATGTGC	AGTTATCGGG	240
AGAAGAAAGC	GGAGCCTCAG	GAACCTTCTAC	AATTGGATGG	GTACACTGTG	GATTACACCG	300
ACCCCCAGCC	AGGTTTGGAG	GGTGGCCGAG	CCTTCTTCAA	TGCTGTCAAG	GAGGGAGACA	360
CCGTGATATT	TGCCAGTGAC	GATGAACAAG	ACCGCATCCT	GTGGGTCCAG	GCCATGTATC	420
GGGCCACGGG	GCAGTCACAC	AAGCCTGTGC	CCCCGACCCA	AGTCCAGAAA	CTCAACGCCA	480
TCCTCGAG						488

## (2) INFORMATION FOR SEQ ID NO:466:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCG GTGAGCCTTG AAGCCTAGGG CGCGGGCCCC 60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAAA CGAGAACTTT 120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG 180
AGAAATAGAA GCATGTATAA TGTAGAAAAA CATATCTTAT CTTATGTTT GCATATATTG 240
TTGAATAAAT ATAGTTTAAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG 300

```

## (2) INFORMATION FOR SEQ ID NO:467:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGGA GGTTCATGG CTGGTCCCAG GGCCAGCACA 60
GGCCCAGGC CGGGCTGCCT GGTTTTATTT TTATTTAACT TTATTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAACAAAA TGCCCTCGTT 360
TGTAACCCCT TAACGCTCGA G 381

```

## (2) INFORMATION FOR SEQ ID NO:468:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA 60
TACTGGTCCC TTAAATTGTC TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA 120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA 180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCTTCT AATGATATGT ATGCAGATAC 240
AGTAACAACT GTGATATTGG AAGTTCAGTC AAATCCCAA ATAAGAAAAG GCGCAGAACT 300
CGAG 304

```

## (2) INFORMATION FOR SEQ ID NO:469:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTCTT 60
AAAAAATTA AAAAAAAG GAGTACCCAT TGGGATAAAC CTCTTTGGAG GAGAGGACAT 120

```

```

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT      180
TACCCCTGCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT      240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCCTCTTTCT CCATCAATGC TATGTTGGTT      300
TTTTTTATTT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG                      346

```

## (2) INFORMATION FOR SEQ ID NO:470:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```

GAATTCGGCC TTCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC      60
AGGGCCTATT TAGAGGCCTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT      120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTGG      180
CTGTGGATTC TCACCTTGAT GATTGAGCTT TGTGTGATGG AGGTGTCTGC CAGAGAATTC      240
CTGGCCACCC AGCTCCTCAG CCCTCTGCCC CCACCCCAA TACACACACC TTTCTCCATT      300
GTACCAGATG CTGGTCTCGA G                                     321

```

## (2) INFORMATION FOR SEQ ID NO:471:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCT TCATGGCCTA CTTCAATTCAC TGTAACCA ATAGCAAACA ACGGAAGAGA      60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCTT      120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CCTGGAAGGC      180
AGCCCCCAG GTATCTCCAC CTCCTCTTT AGGAAGGTGC TGGGCTGGCC CCTCAGGCTG      240
CCGAGGGACC TGTGTAACG GATGCAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG      300
GACAATGCTT ACAACTACTG CTACATGTAC GAGTCCTGA GCCTGGGGCT GCCACTCCTC      360
TGGGCGTTCT CTGAGGTCCT GGCAGCCATG TACAGGGAAT CTGAGGGCTC CCTCGAG      417

```

## (2) INFORMATION FOR SEQ ID NO:472:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC      60
GCAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACAAA ACCAAAGCTT ACAGCAAAGA      120
GGGCTGGGC CTGGCCAGA AGGTAGATCC TGCCAGAAG GAGAAGGAAG AGGTTGGCCA      180

```



GTGGCTCAGC AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT	240
GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG	300
GATTGAGGGC TTGAAGCAGC AGCATCTCGA G	331

## (2) INFORMATION FOR SEQ ID NO:473:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG	60
TATACAGCAG TATGTGTGTG AGAAATTATT TTAATATAA GAATTATCAA AAATTATAAG	120
AAGACCATCC CTTTAACTGA ATAGTTTCAC CAAAAATCAG AAAAAATATGT AAGTGATACA	180
TTTTGTTTCT TGGATATAGC AATGTACCAC CTTCATATAA TGAGACTATT AAAATGATCA	240
CCTGAGGTCA GAAGTTCGAG	260

## (2) INFORMATION FOR SEQ ID NO:474:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 511 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC TTCATGGCCT ACAAAGATTT GAGGAAAAGA GGTCAAATT GGACCACTCA	60
GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAAG ATTGGTTGGG AACTGACCAA	120
GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA	180
CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT	240
GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTTGGAA	300
GAGGATATTA AGAGAGTGGA AGAAATGAGT GGCTTATACT CTCCTGTCTAG TGAGGATAGC	360
ACAGTGCCTC AATTTGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA	420
TACAGCCAAC CTCCAGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT	480
AGCACGTTAG CATCAAGACT GAAAACCTGA G	511

## (2) INFORMATION FOR SEQ ID NO:475:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 610 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTT GTCACTGTCTG GAACATTGTT	60
CATCGTGATT TAAAAGCTGA AAATTTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA	120
GATTTTGGTT TCAGTAACCT CTTCACTCCT GGGCAGCTGC TGAAGACCTG GTGTGGCAGC	180

CCTCCCTATG	CTGCACCTGA	ACTCTTTGAA	GGAAAAGAAT	ATGATGGGCC	CAAAGTGGAC	240
ATCTGGAGCC	TTGGAGTTGT	CCTCTACGTG	CTTGTGTGCG	GTGCCCTGCC	ATTTGATGGA	300
AGCACACTGC	AGAATCTGCG	GGCCCCGCGT	CTGAGTGGAA	AGTTCCGCAT	CCCATTTT	360
ATGTCCACAG	AATGTGAGCA	TTTGATCCGC	CATATGTTGG	TGTTAGATCC	CAATAAGCGC	420
CTCTCCATGG	AGCAGATCTG	CAAGCACAA	TGGATGAAGC	TAGGGGACGC	CGATCCCAAC	480
TTTGACAGGT	TAATAGCTGA	ATGCCAACAA	CTAAAGGAAG	AAAGACAGGT	GGACCCCTG	540
AATGAGGATG	TCCTCTTGGC	CATGGAGGAC	ATGGGACTGG	ACAAAGAACA	GACACAGAAG	600
GCGGCTCGAG						610

## (2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GGAGATTGGC	CACCTCCAAG	ATATGGTAAG	GAAAAGTGAA	CAAGGTCTTG	GCTCTGCAGA	60
AGGACTTATT	GCTAGTCTTC	AGGACTCCCA	GGAAAGGCTT	CAGAATGAGC	TTGACTTGAC	120
TAAAGACAGC	CTAAAGGAGA	CCAAGGATGC	TCTATTAAAT	GTGGAGGGTG	AGCTAGAACA	180
AGAAAGGCAA	CAGCATGAAG	AAACAATTGC	TGCCATGAAA	GAAGAAGAGA	AGCTCAAAGT	240
GGACAAAATG	GCCCATGACT	TAGAAATTAA	GTGGACTGAA	AATCTTAGAC	AAGAGTGTTC	300
TAAACTTCGT	GAAGAGTTAA	GGCTTCAACA	TGAAGAGGAT	AAGAAGTCAG	CAATGTCTCA	360
ACTTTTGCAG	TTGAAAGATC	GAGAGAAAAA	TGCAGCAGAG	AAACTCGAG		409

## (2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GTATGCCTGT	TCCAGACCAG	CCTTCATCAG	CCTCAGAGAA	GACGAGTTCC	CTGAGCCCCG	60
GCTTAAACAC	CTCCAACGGG	GATGGCTCTG	AAACAGAAAC	CACCTCTGCC	ATCCTCGCCT	120
CAGTCAAAGA	ACAGGAATTA	CAGTTTGAAA	GGCTGACCCG	AGAGCTGGAG	GCTGAACGGC	180
AGATCGTAGC	CAGCCAGCTG	GAGCGATGCA	AGCTCGGATC	CGAGACTGGC	AGCATGAGCA	240
GCAAGAGTTC	AGCAGAAGAG	CGGATACTCG	AG			272

## (2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GAATTCGGCC	TTCATGGCCT	ATGCGTGGGG	GTGGGGGGGC	AGGCTAGAAA	GGAGCCCTCC	60
CTCCTCGGGG	TGTCTAGGGT	GTGCTGGCCA	CTGGAAGATT	GGAGTCGCTG	ACCCAGTGCT	120
GACCCTGACC	CTTGGCTGGG	TCCACTCTGC	AGACTCCACC	TGAGGAGACC	CACCCAGGGT	180
GAAGCTCGGT	GCCCAGGCCT	GAAGTAGGCC	CGGCCGGGTG	CAAGGGCTGA	GGTGTGAGGT	240
CGGCCAGGC	CTCTTCCCAG	GCCTGAGGGT	GGCTACAGCT	CGAG		284

## (2) INFORMATION FOR SEQ ID NO:479:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC	TTCATGGCCT	ACTAAATTTT	CCAAAACGTT	GATTTCGATA	ATACAGTGGT	60
ATGTGCAATG	GATAAATGTC	CGTTATTTCA	AAAATTAAAA	TTCTCATTTT	CTTTCTTTTT	120
TTTCCCCCCT	GCTCCACACT	TCAAACTCC	CGTTAGATCA	GCATTCTACT	ACAAGAGTGA	180
AAGGAAAACC	CTAACAGATC	TGTCCTAGTG	ATTTTACCTT	TGTTCTAGAA	GGCGCTCCTT	240
TCAGGGTTGT	GGTATTCTTA	GGTTAGCGGA	GCTTTTTCCT	CTTTTCCCCA	CCCATCTCCC	300
CAATATTGCC	CATTATTAAT	TAACCTCTTT	CTTTGGTTGG	AACGACCTCG	AG	352

## (2) INFORMATION FOR SEQ ID NO:480:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GAATTCGGCC	TTCATGGCCT	ATTAAAAGAA	TGTTCTTTCA	TTAAAAGACC	AAAAAGAAGT	60
TAAACTTAA	ATTGGGTGAT	TTGTGGGCAG	CTAAATGCAG	CTTTGTTAAT	AGCTGAGTGA	120
ACTTTCAATT	ATGAAATCTG	TGGAGCTTGA	CAAAATCACA	AAAGGAAAAT	TACTGGGGCA	180
AAATTAGACC	TCAAGTCTGC	CTCTACTGTG	TCTCACATCA	CCATGTAGAA	GAATGGGCGT	240
ACAGTATATA	CCGTGTTCTC	GAG				263

## (2) INFORMATION FOR SEQ ID NO:481:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GGAGCAGGAA	GAAATGCAAG	AGGAGATGGA	GAAGCTGCGA	GAGGAAAACG	AGACTCTCAA	60
GAACGAGATC	GATGAGCTGA	GAACCGAGAT	GGACGAGATG	AGGGACACTT	TCTTCGAGGA	120
GGATGCCTGT	CAACTGCAGG	AAATGCGCCA	CGAGTTGGAG	AGAGCCAACA	AAAAGTCCCG	180
GATCCTGCAG	TACCGCCTCC	GCAAAGCCGA	GCGCAAAAGG	CTCCGCTACG	CCCAGACCGG	240

GGAAATCGAC	GGGGAGCTGT	TGCGCAGCCT	GGAGCAGGAC	CTCAAGGTTG	CAAAGGATGT	300
ATCTGTGAGA	CTTCACCATG	AATTAGAAAA	TGTGGAAGAA	AAGAGAACAA	CAACAGAAGA	360
TGAAAACGAG	AATCTCGAG					379

## (2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC	TTCATGCTTT	CTAGGCAAGA	GGTCATCAGA	AGATTGAGAG	AAAGAGGAGA	60
ACCAATCAGA	CTATTGGAG	AGACTGATTA	TGATGCTTTT	CAACGTTTAA	GGAAAATAGA	120
GATCCTCACA	CCAGAAGTTA	ACAAGGGATT	GAGGAATGAT	TTGAAAGCAG	CCTTGGATAA	180
GATTGATCAG	CAGTACCTCA	ATGAAATCGT	CGGCGGTCAG	GAGCCTGGAG	AGGAAGACAC	240
ACAGAATGAT	CTGAAAGTTC	ATGAGGAAAA	CACCACAATT	GAAGAGTCAG	AGGCCCTCGA	300
G						301

## (2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 168 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG	AAATGCTTTG	GGTTCATCTT	TCATTGCTGC	AAGGAACTTC	CATGCCTCTA	60
ACACTCATCT	TCAAAGACT	GGGACTGCTG	AGATGTCCTC	TATTCTTGAA	GAGCGTATTC	120
TTGGAGCTGA	TACCTCTGTT	GATCTTGAAG	AAACTGGGCT	ATCTCGAG		168

## (2) INFORMATION FOR SEQ ID NO:484:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC	CATGGAAACC	CCTGCCAAAA	CAGAAGAGAT	AAAACTGGAA	AAGGCTGAGA	60
CAGAGTCCTG	CCCAGGCCAA	GAGGAGCCTA	AATTGGAGGA	ACAGAATGGT	AGTAAGGTAG	120
AAGGAAACGC	TGTAGCCTGT	CCTGTCTCCT	CAGCACAGAG	TCCTCCCCAT	TCTGCTGGGG	180
CCCCTGCTGC	CAAAGGAGAC	TCAGGGAATG	AACTTCTGAA	ACACTTGTTG	AAAAATAAAA	240
AGTCATCTTC	TCTTTTGAAT	CAAAAACCTG	AGGGCAGTAT	TTGTTTCAGAA	GATGACTGTA	300
CAAAGGATAA	TAAACTAGTT	GAGAAGCAGA	ACCCAGCTGA	AGGACTGCAA	ACTTTGGGGG	360
CTCAAATGCA	AGGTGGTTTT	GGATGTGGCA	ACCAAGTGCC	AAAAACAGAT	GGAGGAAGTG	420
AAACCAAGAA	ACAGCGAAGC	AAAGGACTCG	AG			452

## (2) INFORMATION FOR SEQ ID NO:485:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GTTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCCT CAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCTCTACT GGATGTTGTC ATGTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG              352

```

## (2) INFORMATION FOR SEQ ID NO:486:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCACT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTTAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTGTGTAAT      360
TAAGTTATAG CTTAATTAT ATTTAAATGT TTTAAGTATA AATCACCTCT AGGCCTCGAG      420

```

## (2) INFORMATION FOR SEQ ID NO:487:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAG GAATAACCGC TCAGGTTGAG TGTA AAAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTGAGCTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTTACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTCA CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:488:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```
GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTAAAGGAGG AATAGAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAAGGT TTTGCCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTTGT CCAGAATGAA      180
CTGTTCTCAA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCCACCC CCGCCGATAT TACTTCATCT CCCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTTAAAC GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGTT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCTTTATTTA TATAATACAC TTTTATCCAG TTGTCATTTT TTCTTTGTCT TATATTCTCA      480
CATGGAA                                         487
```

(2) INFORMATION FOR SEQ ID NO:489:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATTGTTGAA TGTTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG                                         149
```

(2) INFORMATION FOR SEQ ID NO:490:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 259 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```
GCAAATTTTG GAAGATTTAG ACCATTATTT CTCAAATAT TTCTTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTT CTTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTGCTGATT CTTTCATTC CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG                                         259
```

(2) INFORMATION FOR SEQ ID NO:491:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GAATTCGGCC	TTCATGGCCT	ACAAATGTTT	AATCAGAGAC	TCATATTCAC	CTTTAAGTAA	60
AAAACATACT	TCTTTCCCCC	TAATAGTCAC	AGCATTCTGC	AGAGCTAAAG	AAGGAGACCA	120
GGAGTCTGTG	GGAGCAAAGA	TCATTTGTG	AAGCTAGAGG	TCCAATTAA	AAGCAGTTGC	180
TGCTACAAAT	TAAACATAT	TTGCATTCTG	CCTAAAATAG	TTGTCTCTT	GAACGTTGGG	240
TGCCTTTTTT	AGGTTGCTTT	GTGAATAATA	TGCACAAAAT	GAAAATGTTA	AAAAAACAT	300
GTAGCCTGCT	AACCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 224 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

GAATTCTAGA	CCTGCCTCCA	GCCACTTCAA	ACCTTTGGTG	ACCAAAGTGG	GGTAAAAACA	60
AGCACCTGCG	TGCGTTGTGG	TTATTCTATG	CTCTCCAATA	TATATAAATT	TTAAGAAGTT	120
TTTCTTGAGG	TGGTCAGTTC	TAAACCAAG	AAAGTGGTAG	TAGTTGATTT	TAATTAGTGT	180
AAAGTTGTCT	TCGTAAGTTC	CGTGTGGTT	GGAAATAGCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTGCCTT	CATGGCCTAC	CGAATCAGAC	AGAAGAAAGC	CCAGGGCTCC	ACTTCTTCTA	60
CAAGGTTGCA	TGAGCCCGAG	AAGAATGCCA	GAGAAATAAC	ACAGGACACA	AATGATATCA	120
CATATGCAGA	CCTGAACCTG	CCCAAGGGGA	AGAAGCCTGC	TCCCCAGGCT	GCGGAGCCCA	180
ACAACCACAC	GGAGTATGCC	AGCATTGAGA	CCAGCCCGCA	GCCCGCGTCG	GAGGACACCC	240
TCACCTATGC	TGACCTGGAC	ATGGTCCACC	TCAACCGGAC	CCCCAAGCAG	CCGGCCCCCA	300
AGCCTGAGCC	GTCCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 504 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC TTCATGGCCT AGGTAGCTCT ATGGTTTTCC TCGCGTTCTT GAGTCGGGAA      60
ATGGCCGCTG TGTGGTTGCA ACGGAGATAA ATTCCCGGAA CCGCGATTCC GCGTGTCAGG      120
AATTCGAATT TAGAGTTTAA TTCTCAGAG CATTCTCTCC AGGAAGAATT TTTACAGTAT      180
CTCAAAGACT TCACTTGACT TCTTGATCCT GCATAAAACC AAGGAGAAAA GAAATGGGTC      240
GCTCCAATTC TAGATCACAT TCTTCAAGGT CAAAGTCTAG ATCACAGTCT AGTTCTCGAT      300
CAAGATCAAG ATCTCATTCT AGAAAGAAGC GATACAGTTC TAGGTCTCGT TCCAGAACAT      360
ATTCAAGGTC TCGTAGTAGA GATCGTATGT ATTCTAGAGA TTATCGTCGC GATTACAGAA      420
ATAATAGAGG AATGAGACGA CCTTATGGGT ACAGAGGAAG GGGTAGAGGG TATTATCAAG      480
GAGGAGGAGG TAGAAACCCT CGAG                                         504

```

## (2) INFORMATION FOR SEQ ID NO:495:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC TTCATGGCCT ACCAACTTAG TCATTGAAG CCCAAGAGTC TAATTTTATA      60
TGCCCTGCCA ATGTCCTCAT CTATTGCAGA ATGNATAATT ATCTATTTGT TTTGGACTAT      120
ATGTTACAAA AATTTAAAC ATAAGATCCT CTCTCTATAT TTCATTATTG GTGAACCCAC      180
ATTGCTCGAG                                         190

```

## (2) INFORMATION FOR SEQ ID NO:496:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC TTCATGGCCT AGGTAAGAAA ATCGTCAATG AATTGTGGCA TGACCAGGTG      60
GAGAGTAAGT GTCATAAAGA GGGATAGTGG ATAGTATAAT GTCAGGCACC TCAAAGGAAC      120
TGGGCAGGGA GTTAGGGAGT AAAAAGGGCG GTGGTCTGGA AGCAGAAAGG AGGAGCAGTG      180
GTCCAGTAGG GGCTGCAGAG CTGCAAGGCT TTGCCTCAAT CCTGTCAAAG GCAACTTCAA      240
GCTTTCAGG AGCCATACTC CTTCAATTGT TCATTACTTT CTAGATTAGG AAATCAACCAC      300
TCGAG                                         305

```

## (2) INFORMATION FOR SEQ ID NO:497:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:



```

GAATTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTCA TGGCCAACTG      60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG     120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTTGCAGGCA CGAGGGCTCA     180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG     240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTACTTCCTG ACCCTAACCT     300
CCGGAATCT GCTGTCAAAG GCAGATTCTT CGAG                                     334

```

## (2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAATTAGGGG CTTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA      60
GTATCTGCTC CTCAGAACCA TTTTATAGAA AAGAATAATA CAAAACACAC AACTGCAAGA     120
AATGCCTTTG AAGAAAATGA TTTTATGGAA AACACTCGAG                               160

```

## (2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC      60
CCAAAGTTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CCTTGTCCTG GATTTTTTAA     120
CCAAGCACTA TTATTTATAG TTGCGTTAAA ATAAATAGGG ATGGGTTTGA TAAGTCACCA     180
CTTGGTGCTT TAAATTCTGC CATCATCTTT TCTAGGAGTG TAAGATATAG AGATACACAT     240
AAGCAGAAAA TTTTTTTTAA CATGAGGATA CTCGAG                               276

```

## (2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT      60
TTGTTCTCTC TTGTTTCCTC TCTATTTTCA CCTAGTATCA GAAGGCCAGG CGAGACTGCA     120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG     180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA      240
ACAGCAGTGT CTCGAG                                     256

```

## (2) INFORMATION FOR SEQ ID NO:501:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTTG TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCAGG CTAGAGTGCA GTGGCATGAT CAGGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTGCCCCAG      240
GCTAGTCTCA AATTCGGGG CTCAAGCAAT CCTCCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG AACTATCTT AGATCCNNA AGGAAAAAA AAAAAAGAAG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTGGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CGGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTTAGGCC AAAGGCTATG ATTAATTCA AGCTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG                                     635

```

## (2) INFORMATION FOR SEQ ID NO:502:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGAAGTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGGTTCCTGC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATTGA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTTCTTC TCAAAGGGTA      360
CTTCCACTGA TGGAAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCCTCTT GCCATCTATA GGGGCGCTCG AG                                     452

```

## (2) INFORMATION FOR SEQ ID NO:503:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATTGT CTTGACATAA GTAATTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAATTAAG AAACATGGCC CGGTTGCAA ATTTTAATGC ATGACTACCT      120

```

TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA	180
TTAAGAACCA CTGGTCATGA GTGGTGATTT TCAGCTTTT TGGTCTTAAC CCACTTAGGT	240
GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG	286

## (2) INFORMATION FOR SEQ ID NO:504:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 424 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGGA GACAGCTACT	60
AAGTAAACTA CAAAATAATT GCTAAACTGA AAATTGTATA AAGTGACTG GACAGATGAT	120
GTTCTTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC	180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAATAAAG	240
AATCAATTAG AAATCCACT GAAAATTCTT CTAAATATA ACCAACTTCA TTATGACAAG	300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA	360
TGCCTTAAAT TGTTGGATTT TTTATTGTTT TTGTTCTGT TTTGGAGATG GGGTCTCACT	420
CGAG	424

## (2) INFORMATION FOR SEQ ID NO:505:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTACTCA GTTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA	60
TTCTTTCCCA CCATCCTTTT TGACTGTGTA CCTTGGTTT CTCTTCTAAG TTTCTGTCCC	120
TCTGCTTCCT TACTTTTTT CTTTTTGAA TTCTATCTTT ATCTGTCTTT TGTTCACTTT	180
TTAATGCTAT ATATGGATCT CGAG	204

## (2) INFORMATION FOR SEQ ID NO:506:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA	60
CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAACTAC TGTTATTTT GCTTATATTC	120
TTCTCTAAAA ATTCACTAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA	180
AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG	218

## (2) INFORMATION FOR SEQ ID NO:507:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GAAGTTTAAC ATTTCAACTG TTGGTAAAAT CTCCTGGTG CCACCTTGTC GCACCCCTCT    60
GTTATGAGGC ACAGTTAGTG GGTATTAGAG AGGTTTGTTT AGTGAAGCTC CTGCCACTGT    120
AGACCTAAAT GTTCTCTCC CTGTTGAAGT GACCTGCCTT CCTCTTTAGT ACCTAACACA    180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTCTTTTGG GGGCAGGCTT CCCTTTCTCT    240
CTGGCAGGTA TATTAATAAA TTACAAAATA GTAAATTTGC CAAATTTTTC TTGGTGTGTA    300
GCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTTCCCTCG AG          352

```

## (2) INFORMATION FOR SEQ ID NO:508:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG    60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA    120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT    180
TCTGACAGAA TCCAGCACAA AAACAGAGAG GGTGCAGAAA AAGAGATTTC GTCACCTAGA    240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG          283

```

## (2) INFORMATION FOR SEQ ID NO:509:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TCATGGCCTA CTCTCCTTC TTAAGTTGTG TACTTGGGGG CACTTTTGAT    60
TTTGGTCCCA CATCATTGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCCTGGCA    120
TCCTCTGATC CAATGCCTTT TTCTGCTCT GCAGCGTCAT CTTCTCCTC ACTACTGCTT    180
CCCTCAGATT CTGAATTGGC ATCCTCCTCT TCCTCTTCTT CTAATGAGAG GCCACCTTGT    240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTTCTTTTTT TCCCTTGGGT TTTCTGTGTC    300
TGCTCTTCAC CATTAGGCCA TGAAG          325

```

## (2) INFORMATION FOR SEQ ID NO:510:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 281 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GAATTCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGGA TTTTAGAAGG TTACTACTGGA	60
TACATTTCCA TTAAGCTTCA CGATATCCCA CAGGTCCATT CTGTGTGAAA TGGTCTAAAA	120
ATTCCTGTGTT CTCATGCTTC ATTTTCTTCT TTTAGTAATA TTCCTAATTG TGTAATAATAG	180
TATTTCTTTT CATTTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA	240
TACTTTTGGG CTTCAAATGA GTGACCCAC TCAGACTCGA G	281

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

GAATTCGGCC TTCATGGCCT AATTCCTTG ACTCAAGACA GCTAACTTCA TTTTCAGAAC	60
TGTTTAAAC CTTGTGTGC TGGTTTATAA AATAATGTGT GTAATCCTTG TTGCTTTCCT	120
GATACCAGAC TGTTCCCGT GGTGGTGTAG AATATATTTT GTTTTGATGT TTATATTGGC	180
ATGTTTAGAT GTCAGGTTTA GTCTTCTGAA GATGAAGTTC AGCCATTTTG TATCAAACAG	240
CACGCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

GAATTCGGCC TTCATGGCCT AATTGATTCT AATCTTTCCC AAACAGTGCT GTGGCAATGT	60
ATGAAAGTAA TAAAAATAAT CCTTTTCTG TTAACAAAAA AATTGCTGTT ACTTGCTGTT	120
TTGTTATGCT TTTGCTGGAG ATTTCCAC CCATCTTAAA GCAGCAACTT CAGGATGGGG	180
GAATCAAGCA AAACCATGGT GAAGAGATTC ATTTAAAGAG GACAAGTCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC	TTCATGGCCT	AGTCACCTTT	TGTGGGAACT	TCTCTCAGCG	AAGCGGAGCA	60
TGCGAATTTG	ACATCATGAT	TGTCTGAAAA	TTGGTAAGCC	ACTATCCCAG	AAAGAGCTCC	120
CTATGCCAG	GGCTTGCAAT	GCTAAGAGAA	GGAGGCAGGA	GAGAGACAGG	GAGCGACACT	180
ACATTTGGTG	GGGTGAGGAT	ATGAGGTTCC	TTGGACATCA	TGGCCTCCAG	TGAATATGTG	240
GGTGATGGCT	TGGAACCTAA	GCTTTTTTGC	TAGTGCCCCA	CAAAAGAGTA	CCCTCCACAA	300
CCCATCTGTG	GACCACAGCA	GTGCCTCTCA	ACAAACATGT	GCCCCAAGGA	GTCTCGAG	358

## (2) INFORMATION FOR SEQ ID NO:514:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC	TTCATGGCCT	AGAATAGAGG	AAAATAGCCG	CCTGGTGGCT	AGACAATTTA	60
GGTGTAGAAA	ACACATTTAT	ATGGTTCTTT	GAATGTAACA	GTGGTAAAGA	ATATAGGTTT	120
AGTTGTTGCT	GCTAAGTAGG	GGGAAATGAC	ATTTTATCT	GGTATGTTTG	AGAATAAAGT	180
AAATTTCAAA	ATTTGAGATG	ATCGAAGTTT	TTATTTATAA	ACTTAAGTAT	TATTATAATA	240
TGTTACATAT	TTTATCTTTT	AAAAATTGTA	ATTCAGAGAG	TGTAACAAAA	TGTACTTCCT	300
CACCTTCTTG	CTTTTGTGTT	CCCAGAAGTA	ACTCGAG			337

## (2) INFORMATION FOR SEQ ID NO:515:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAAAAGATGG	AAGAAAACCA	CCATAGCACT	GCAGAAGAAC	TACAGGCTAC	TCTACAAGAA	60
TTATCAGACC	AGCAACAAAT	GGTACAGGAA	TTGACAGCTG	AAAATGAGAA	GCTGGTGGAT	120
GAAAAGACGA	TTTtagagac	ATCCTTTCAT	CAGCATCGAG	AGAGGGCAGA	GCAGCTAAGT	180
CAAGAAAATG	AGAAGCTGAT	GAATCTTTTA	CAAGAGCGAG	TAAAGAATGA	AGAGCCCACC	240
ACTCAGGAAG	GAAAAATTAT	TGAACTGGAG	CAGAAGTGCA	CAGGTATTCT	TGAACAGGGC	300
CGCTTTGAAA	GAGAGAAGCT	ACTCAACATT	CAGCAGCAGT	TGACCTGTAG	CTTGCGGAGA	360
CTCGAG						366

## (2) INFORMATION FOR SEQ ID NO:516:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT    60
GTCTCAAAAA AGAAAAAGAA AACAAATCCA GGATTATTAT TTCTACGTAA ATGTGACATA    120
TTATTTCTAT GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCCAAT AATGATTATG    180
AGAAAAAGTA CCCTCTGTTT GAAGGCAATC ATGGGGAAAA TATAATTCAC AAAGTATTTT    240
AAAATTAAAA TCCTGTGTAT TTCAAAAGAC GATGGTCCTA TTTTAAGAAA AATAACCTTG    300
CAATTCATTT GCTTTTTCAT TGGCTCGAG                                     329

```

## (2) INFORMATION FOR SEQ ID NO:517:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGTCCTTTCA AGTACACAGA GAAATTTTGC TTGAATTTCT    60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC    120
AGCGGCACTT CTTTCTTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA    180
TCCGGAAGTA CAAGTTCACC TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAAATCA    240
TCTTGCTCAG AGAAGTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTTGCATGG    300
AAAGCCCCAG TCTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC    360
ATCTCGAG                                     368

```

## (2) INFORMATION FOR SEQ ID NO:518:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC    60
TGCAATGATA CTGTTGTCCT CACTCACCCT GCACCCCATC TTGAGGCTTA TCATCACCAT    120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTTGCCATTC ATAGATACAT    180
ACCCCTTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT    240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT    300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAAG    360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

```

## (2) INFORMATION FOR SEQ ID NO:519:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC	TTCATGCCTA	CTTTGGTAAC	AGAAGAGAAG	ACTGTGGAGC	CAGCTACCGT	60
CTCAGAAGAA	GCAAAGCCTG	CATCTGAACC	TGCTCCTGCC	CCTGTGGAAC	AGCTGGAACA	120
AGTAGACCTG	CCCCCAGGAG	CAGACCCCGA	TAAAGAAGCT	GCCATGATGC	CTGCGGGTGT	180
TGAGGAAGGT	TCATCAGGTG	ACCAGCCGCC	TTATCTGGAT	GCCAAGCCTC	CAACTCCCGG	240
GGCCTCGTTT	TCCCAGGCAG	AGAGCAACGT	AGATCCAGAG	CCTGACAGTA	CCCAGCCACT	300
TTCAAACCA	GCTCAGAAGT	CTGAGGAAGC	CAATGAGCCA	AAGGCCGAAA	AGCCAGACGC	360
CACTGCAGAT	GCTGAGCCTG	ATGCAAACCA	GAAAGCCGAA	GCTGCTCCTG	AGTCTCAGCC	420
CCCAGCTTCT	GAAGATTTAG	AGGTTGATCC	TCCAGTTGCT	GCAAAGGATA	AAAAGCCAAA	480
CAAAAGCAAG	CGTTCAAAGA	CCCCTGTTCA	GGCAGCTGCA	GTGAGTATCG	TGGAGAAGCC	540
CGTCACAAGG	AAGAGTGAGA	GGATAGACCG	GGAAAAACTC	AAGCGGTCCA	ATTCTCCTCG	600
GGGAGAAGCA	CAGAAGCCTT	TGGAATTAAA	GACACTCGAG			640

## (2) INFORMATION FOR SEQ ID NO:520:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GAATTCGGCC	TTCATGGCCT	AGCAAGAGAA	AGAGAAGTGC	AAACACTCCC	ACGGCGAAGC	60
GCCCTCCGTG	GACGCGGATC	CCAAGTTACC	CAGTAGCAAG	GAGAAGCCCA	CTCACTGCTC	120
CGAGTGCGGC	AAAGCTTTCA	GAACCTACCA	CCAGCTGGTC	TTGCACTCCA	GGGTCCACAA	180
GAAGGACCGG	AGGGCCGGCG	CGGAGTCGCC	CACCATGTCT	GTGGACGGGA	GGCAGCCGGG	240
GACGTGTTCT	CCTGACCTCG	CCGCCCTCT	GGATGAAAAT	GGAGCCGTGG	ATCGAGGGGA	300
AGGTGGTTCT	GAAGACGGAT	CTGAGGATGG	GCTTCCCGAA	GGAATCCATC	TGGATAAAAA	360
TGATGATGGA	GGAAAAATAA	AACATCTTAC	ATCTTCAAGA	GAGTGTAGTT	ATTGTGGAAA	420
GTTTTTCCGT	TCAAATTATT	ACCTCAATAT	TCATCTCAGA	ACGCTCGAG		469

## (2) INFORMATION FOR SEQ ID NO:521:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GAATTCGGCC	TTCATGGCCT	ACCCGTTTCC	TCTAGTTTCT	TCCTGTAGTA	CTCCTCTTTT	60
AGATCCTAAG	TCTCTTACAA	AAGCTTTGAA	TACTGTGAAA	ATGTTTTTACA	TTCCATTTC	120
TTTGTGTTGT	TTTTTTAACT	GCATTTTACC	AGATGTTTTG	ATGTTATCGC	TTATGTTAAT	180
AGTAATTCCC	GCGGCCTTCA	TG				202

## (2) INFORMATION FOR SEQ ID NO:522:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCGGCC	TTCATGGCCT	AAATTTAATG	AAGCAAAATT	CCATACATCA	TTTGAAAAAT	60
AGTGTTCCTT	TCCCTGATAG	GCCTGTTCTG	CATCATTCTT	TTAGCTTCCT	TCTGCCCTGT	120
TTATCACTTG	GTCCCACTTT	TATATTTTTC	CTCTTCGGTC	CAGAATTTCT	TATTTAGTTT	180
CTTGATTTTT	GCCTACTCCC	TCCCTTCTCC	ATGATTCAGC	CTAGTCTTTC	CGTCCTCTGT	240
GGACTTGGGT	GTGCCTTCCT	CTGGGCCACC	TCGTCTTTTG	CTGCTGTTAG	CCCTCCCGCC	300
TGCGCACCTG	CCACTTCACC	CTCGCTGTG	GTCCACTTAC	GTTCCACTCA	GCCCGGTCAG	360
TCCTGCTTTG	TTCTTCTCCA	CCGCCTTGGT	CTCCCGTGTG	TCTTATCTAG	CTCTGGTTCC	420
TTCTCGTCTC	CACATTTATT	TTGTTTTCTT	CCTGTGCTTG	TTAGTCCTTG	TGCACTTGGC	480
CCTTTTCTCG	AG					492

## (2) INFORMATION FOR SEQ ID NO:523:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCGGCC	TTCATGCCTA	GGAAATTTCA	CCATTGTGGT	TCCCCCTTTG	TGGGTCAGCA	60
GGTGGTCAAG	ACAGGGGGCA	GCAGTAAGAA	GCTACAGCCC	GCCAGCCTGC	AGTCTCTGTG	120
GCTCCAGGAC	ACCCAGGTCC	ATGGAAAGAA	ATTATTCCTT	AGATTTGATC	TAGATGAAGA	180
AATGGGGCCC	CCTGGCAGCA	GCCCAACACC	AGAGCCTCCA	CAAAAGAAG	TGCAGAAGGA	240
AGGGGCTGCG	GACCCAAAGC	AGGTCGGGGA	GCCCAGCGGG	CAGAAGACCC	TTGATGGATC	300
CTCACGGTCT	GCAGAGCTCG	TCCCCCAGGG	CGAGGATGAT	TCTGAGTATT	TGGAGAGAGA	360
CGCCCTGCA	GGAGATGCTG	GGAGGTGGCT	CGAG			394

## (2) INFORMATION FOR SEQ ID NO:524:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

CGATTGAATT	CTAGACCTGA	CCAAAGACCT	TCCGTACAGA	TTGACCGCAG	AATGTCAGGG	60
AAAGTTAGGA	GAAGAAGTTC	TGAGAAGACT	GACTACAGAT	TGGCTGGCCT	GGCTGACCCA	120
GGAACCTCTG	AGCAGACTGA	CCTCAGATTG	TATGGCCTCG	TTGACCACAA	AACATCTGTA	180
AAGACTCACC	ACCAAGTGTA	CGGCCAAGCC	ACTGAACTAG	CTGAACACCA	GGCTATTGAC	240
CAAGCTCATA	GTAATGCTGA	TCAACCTCCA	GTTGACAATG	CTCACTACAC	TGAATCTGAC	300
CAGACTGACC	ACTTAGCAGA	CAGACAAGCT	AATCATAAAG	ACCAGCTGTC	TTACTATGAA	360
ACACGTGGCC	AGTCTGAAGA	CAGAATATTT	CCCCAGTTAG	GCAACAGCAA	AGAGGACAAA	420
GAGGCTGACT	ACAGAGTACA	ACCCTGCAAA	TTTGAGGATA	GCCAAGTAGA	CCTCAATTCC	480
AAGCCTTCAG	TTGAAATGGA	AACTCAGAAT	GCAACCACTA	TCCCACCCTA	CAACCCAGTT	540
GATGCCAGAT	TCACCAGTAA	ATTCCAAGCA	AAAGACCAAG	CTCTTTTCCC	AAGACTCGAG	600

## (2) INFORMATION FOR SEQ ID NO:525:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

```
GAATTCGGCC TTCATGGCCT ACTTTCTTCT GCTGGCTTCC ATCTTGCCAC ACTTTCTTGC      60
TCTTCCTTCT AACTGAAAGA CTACTTCTCC ATCCCCTCTG CAGGCTCTTT TGCTCCACCT      120
GATATTTAAA TGTTGGAATG CCTAGAGTTG TTCTGACCCT TCTTTATCTA CCCCATTTC      180
CTCAGTGATC TTATGCAGAG GTCTCCCAA GTTTACATGG CTATCCTTGA CCTCCTTCCT      240
GAACTGCAGC TGGTGTGAGC TGCCGTCACT TGGATGTTTA ATCAGCAACT CAAGGTTTAC      300
GTGATGATTA GACCGCAGTT ACCCCCAGAC TTCCTTATCC CTTAGTTTTT CCCATCTCAT      360
TAAGTTCACT TCCATTCACT TTCTTGATGA AGCCAAGTAT TTCAGAACTA GCCTTGTTTC      420
TTCTTTTTC CTTTCCCCA TATCAATTCC AGACTACCA CTCGAG                        466
```

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

```
GAATTCGGCC TTCATGGCCT ACATTGTAGA AGAGATCACA GAAACCACAA AAGGTTTTCT      60
GAAGTATATG GATAATCAAT CATTTGCAAC TGAAAGTCAG GAAGGAGTTG GTTTGGGACA      120
TTCACCTTCA TCCTATGTGA ATACTAAGGA AATGCTAACC ACCAATCCAA AGACTGAGAA      180
ATTTGAAGCA GACACAGACC ACAGGACAAC TTCTTTTCTT GGTGCTGAGT CCACAGCAGG      240
CAGTGAGCCT GGAAGCCTCA CCCCTGATAA GGAGAAGCCT TCGCAGATGA CAGCTGATAA      300
CACCCAGGCT GCTGCCACCA AGCAACCACT CGAAACTTCC GAGTACACCC TGAGTGTTGA      360
GCCAGAACT GATAGTCTGC TGGGAGCCCC AGAAGTCACA GTGAGTGTCA GCACAGCTGT      420
TCCAGCTGCC TCTGCCTTAA GTGATGAGTG GGATGACACC AAATTAGAGA GTGTAAGCCG      480
GATAAGGACC CCCAAGCTTG GAGACAATGA AGAGACTCAG GTGAGAACGG AGATGTCTCA      540
GACAGCACAA GGCCTCGAG                        559
```

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```
GAATTCGGCC TTCATGGCCT ACGCAGTGGT TCAATTTTCT TCGAAACGGT GTGGTCCCTG      60
CAAAAGGATG TTTCTGTTT TCCATGAGCT GGCTGAAACT TGTCACATCA AAACAATACC      120
CACATTTCAG ATGTTCAAGA AAAGCCAGAA GGTAACCTTA TTCTCAAGAA TCAAAAGAAT      180
AATTGCTGT TATAGAAGTG GATTCATGAG CAACCTGATT TTTGAGTTT GTGGAGCCGA      240
TGCTAAAAAA TTGGAAGCCA AGACTCAAGA ATTAATGTAA GCTGATCTCC AAGGCAAAAT      300
ACACTTGTGC CGCTCGAG                        318
```

## (2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA      60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA      120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC      180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG      240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG      276

```

## (2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 180 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT ATTCTGTTCT TAAATTTGA ATGAAAGTTT GGCATTTTAA      60
AAAACCTTAG GTGATTAGG AGTATAATTT TAAGCAGATT TTAGAGTAC GAGTGTCCAC      120
ATATTTAAC AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG      180

```

## (2) INFORMATION FOR SEQ ID NO:530:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCTG CTA CTGGCCC      60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT      120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC      180
TGTACGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GCCTGCCGG      240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC      300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA      360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGCAATA      420
AGCTGGAAT ACTGGAGACC ATCGTGACA GAATAGTAAG AGCCCTCGAG      470

```

## (2) INFORMATION FOR SEQ ID NO:531:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```
GAATTCGGCC TTCATGGCCT AGAAAATTCC AGAAAGGATA TTAAAGAAAA TACAATAAAC      60
TATTGGAAAG TACTCCCCTA ACCTCTTTTC TGCATCATCT GTAGATACTA GCTATCTAGG      120
TGGAGTTGAA AGAGTTAAGA ATGTCGATTA AAATCACTCT CAGTGCCTCN TACTATTAAG      180
CAGTAAAAAC TGTTCCTAT TAGACTTTAG AAATAAATGT ACCTGATGTA CCTGATGCTA      240
TGGTCAGGTT ATACTCCTCC TCCCCCAGCT ATCTATATGG AATTGCTTAC CAAAGGATAG      300
TGCGATGTTT CAGGAGGCTG GAGGAAGGGG GGTTGCAGTG GAGAGGGACA GCCCACTGAG      360
AAGTCAAACA TTTCAAAGTT TGGATTGTAT CAAGTGGCAT GTGCTGTGAC CATTTATAAT      420
GTTAGTAGAA ATTTTACAAT AGGTGCTTAT TCTCAAAGCA GGAATTGGTG GCAGATTTTA      480
CAAAGATGT ATCCTTCCAA TTTGGAATCT TCTCTTTGAC AATTCCTAGA TAAAAGATG      540
GCCTTTGCTC GAG                                     553
```

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 843 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```
GAATTCGGCC AGAGAGGCCT ACTTCTCTTA GTGATTTCAT GTTTCAACCA GTACATTGTG      60
GTGAATACTG AAATATCTTG TTAAATTCAG ATAATTAAAA TGGTGGCAAA GGAAGCTGTT      120
TAGCCAGAGC CCTTCTTGAC TTTGAGGAAC AGTGGTAGTA TAAGACTTGA AGACAGACGT      180
GTAAAAAGTA CTACTCACTG GTAGGCTCAG GTCTGGTTGA TTGACTGATT CTTGAGACGG      240
AATGTCGCTC TGTGCGCTAG GCAGGAGTGC AGTGGCCCAG TCTCGGCTCA CTGCAGCCTC      300
CGTCTCCGGG TCCAAGCGAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ACTACAGGCG      360
CCCGCCACCA CACCGGGCTA ATTTTGTAT TTTTAGTAGA GACGGAGTTT CACAATATTG      420
GTCTCGAACT CCTGACCTCA GGTGATCCAC TCGCCTGGCC CACCCAAAGT GCTGGGATTA      480
CAGGGATGAG CCCCTGCGCC TGGCCTCGGT TGAATTTATT AAACAACCTT TGTGGGCAGC      540
AAGCTGTACG AGGTAACTA TGTGATGAGA AGACTTAGAA ATGGAGAAAA GTTTTATCAG      600
TTCTACATAG GACTTAGTTT GGGAGTTTCT GGAAACTACG TTGGAAATCA GTAGTTGCAC      660
ACTAGCTGAA TTCAGCTGTG TAATTTACAG TGATTGTGTA TTTACCAAAT AAGTAGAAGA      720
GGGAATTAAG AAGCTAAAAT CTCTGGGTAC TTGTTTGATA TGAATTTGTT AATTGTTTAT      780
ACTCAGGTAA TAAGTGTTAC CTCAGTCATA GCATTAAATA TTTTATCTGA CTGTCCTCTC      840
GAG                                     843
```

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 525 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

GAATTCGGCC	AAAGAGGCCT	ACATCCAGAA	ATTTAGGGAC	TCAGCCCTGG	TCAGGGTGGC	60
AAAGGGTCTG	TTTGTCTTTC	CCCATTAGAC	AGAGGTCTTG	TCCTGCTACC	CTAATTGTAA	120
AGGGGTGCCT	GGGAAGGGGT	GGTAGGGACA	TGGTGGCGGT	GGAGACTCCG	GCCCCACTTC	180
TCCAGGCTTT	GCTGACAGGG	GCCTGCTTTT	AATTTTTATT	TTTATTCCAT	GACTTTTTAA	240
AAAAGAATCC	CGTAACTTCT	TTTTCATAAC	TTTTTTTGA	ACTTTTCATA	ATACTGTTTT	300
CTACTTTGTT	CCCACAAGTT	TTTTTGCCAC	AACGTTTTTA	CATTTTTTAT	CCCATAACTT	360
TTTCACCCCA	TAACTTTTTT	AAATAAAGTT	ATTTAATAAA	ATAACTTTTT	ATAAAACTTT	420
AATAAAAGTT	TTTAAATTAA	CCATAACTT	TTTTATTTTG	GTTTTTAATA	AACACTTGCA	480
TAGTTATATT	ACAACCTTGT	AAAAATGAAA	CACATTATCT	CAGGC		525

## (2) INFORMATION FOR SEQ ID NO:534:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

GAATTCGGCC	AAAGAGGCCT	AGAAAACCCCT	TGAAGACATG	TTGAAAATAC	ATACTCCTGT	60
TAGCCAAGAA	GAAAGATTGA	TTTCTTAGA	CTCCATTAA	TCCAAATCCA	AAGACTCTGT	120
GTGGGAAAAA	GAAATAGAAA	TACTTATAGA	GGAAAATGAG	GACCTCAAAC	AACAATGTAT	180
TCAGCTAAAT	GAAGAGATTG	AAAAGCAAAG	GAACACTTTT	TCATTGCTG	AAAAAACTT	240
TGAAGTTAAC	TATCAAGAGT	TACAAGAG				268

## (2) INFORMATION FOR SEQ ID NO:535:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

GGCTTGCACC	TCGGCGATCC	CGACTCCCT	TCTTTATGGC	GTCGCTCCTG	TGCTGTGGGC	60
CGAAGCTGGC	CGCCTGCGGC	ATCGTCCTCA	GCGCCTGGGG	AGTGATCATG	TTGATAATGC	120
TCGGAATATT	TTTCAATGTC	CATTCCGCTG	TGTTGATTGA	GGACGTTCCC	TTCACGGAGA	180
AAGATTTTGA	GAATGGCCCC	CAGAACATAG	ACATTCCTCT	CGAG		224

## (2) INFORMATION FOR SEQ ID NO:536:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

GAATTCGGCC	TTTCATGGCCT	ACCACTCTGG	CCCCAGCGTC	ACTGGCCTAG	GGACACATGG	60
GGGTGGGGAT	TGTTTGGCCT	TCCTGGCTTA	GGTCTCTGGA	AGAGAGAAGA	ACCCCATGGG	120

```

GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT 180
GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG 240
CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCCC CCAGCTCCTC 300
GAG 303

```

## (2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA 60
AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTC AGGTGCAAAG AGTGTTTTTT 120
TTTTTTTTTT TTTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG 180
AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT 240
TCGAAAGGTG CAAAAGGAAG TCTTCCATCA CTAGCTCAGC TGTATGGTC CTTGAAGTGC 300
CCTTGCCCGT CTGTCTTTT ATTAACTCCT TTTACCTGTC GAGTCTCGAG 350

```

## (2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```

GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG 60
TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCCTG CAAATTTAGT ATCAAATGCA 120
CCTTATGATC GTCTAAACT CAGCCTGCTG ACCAAAGTCT GGAACCAGAT AAGCCTTAT 180
ATTCGCCACA AAGATGTTAA TGTTCTGTG TCAAGTCTCA CACTCTTGGG AGCTATAGTG 240
TCCACCCACG CACCTTTACC TGAAGTCCAA CTACTTCTGC AACAGCCATG TTCTTCTGGA 300
CTCGGTAATA GCAATTCAGC AACCCTCAC CTCAGCCCCT CGAG 344

```

## (2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```

GAATTCGGCC TTCATGGCCT ACAAATCCAT TAAACCACCA CCAGCTCCCC AAGCCACCCC 60
TTCAGCCATG AAGTTCTGTC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT 120
CCCAGCCAGT GCAGGTGGGT CAAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG 180
TTGCCACTGG GGGGAGACAG CATTGTTCAT GTGCAACGCT TCCAGAAAAT GCTGCATCAG 240

```

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300  
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 248 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60  
CAGCATCTCT GGTCAGTGGC CCTATAGCCG TACAGACTAC ACCTGGAAAA CAGCTCTCGC 120  
TGACCCATCC TGAAATACTA GTTCCTCAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180  
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCAGT GTACCCACAA 240  
ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60  
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120  
AAATTAAGGT CTACTCTCCC TAAATACTAT CATAATTACA AAGGTAAAGA AAAAAGAAGT 180  
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240  
GAGAATGAGA ACTCCAGTTG CTGTGTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300  
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360  
ATTTCCAGT GTTTGACCTT GGGCCACTTA CTGTTCTTT CTCAGCCTCC ATTTTCATAT 420  
CTAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 493 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTGGGCC TTCATGGCCT AGACACGGGA CATAAAAACT TTTAATGAAG GAGGACACAG 60  
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120  
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAAGCCT AAGGATGTCC CCGATCTTCT 180  
TCTGCCAGTT GCGGATGTCC TTGGACACGG CGCACCACAG CTCCCCATGC CGAGGCTCTG 240  
CACTCTCACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

ACTTGTAGAA GAAGGCCAG GCATCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA	360
ACCAATCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAA CAGCTTGGCC ACGGCCAGGA	420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG	480
GCCTTGCCCTC GAG	493

## (2) INFORMATION FOR SEQ ID NO:543:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GGAAAAAAGA	60
AGCAAAAAGC CCAAAGAAAA AAACATTTTA TATTCATCTG TATAACATA TCCGCTAAGG	120
CAAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA	180
TTCTAAGGCC AAAAATAAA ACCTCTGCAA GTCCGCGTAG CTTCAGGAC TCCTGGGCAT	240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG	300
AAAGTTGCAT AACTGTGGCC TCGAG	325

## (2) INFORMATION FOR SEQ ID NO:544:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 473 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA	60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA	120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTAGATT	180
CCTTTATTTT TTTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA	240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC	300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCCTCTGTA TCATGACTAT	360
CATAAATTTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC	420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG	473

## (2) INFORMATION FOR SEQ ID NO:545:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 120 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG	60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG	120



## (2) INFORMATION FOR SEQ ID NO:546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCTTAGA AATGGAAAA GCATGCAAGA GAGATGTTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAAT ATTGGGAAAC ACAAAGTGTT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTTGAAAG      240
TAAACACCA CAAGAGTATG CTGAAGGGAG TGTGAAGAA ACAATGGAAA ATAATTACCA      300
AAAGGATGCT GAAGGGGATA TTGAAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCCTTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGA ACAATCTCGA      480
G

```

## (2) INFORMATION FOR SEQ ID NO:547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTCGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTCACGGTA      60
CTGTCCCTTT CCCCCAGCTC CTCCCTGACC CCATGGGCCA GGCCTCAGAC CTTCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CTTCCAGAG CCCATCTGCC CCGCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCCTGGTA AGCAAAGAGC TCGAG

```

## (2) INFORMATION FOR SEQ ID NO:548:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTTCAATA TCTACTCAT TATCCCATGC CATTCCCCCA      120
CTGTCTCAAC ACGAATCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:549:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 296 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```
GAATTCGGCC TTCATGGCCT ACTATGGTAT TGCTAAACAA GGGTGGGAGG AGAGAGAGGT      60
AATCAGGGAG GACTTCCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAAA AGAAAAGAAT      120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCACACAC TTTCCTTGTG GGTGGAGGAA      180
ACCATCCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAAGG AGGCAGGAGA GGAGAGAAGA      240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG      296
```

(2) INFORMATION FOR SEQ ID NO:550:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```
GCAGGAGAGA AAATTGAGGC TTAGGTAAAG AAAGTTACCC AAAGTCAAAC AATTTAATTG      60
GTTTGGAAG ACCAGGAAGA CTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA      120
ACACTTGACA GCAGGTTTAT ACAAAGACAG ATTGGTATC TTTGGAGGGA ATGAGTTTC      180
AGTCATTGCA GGTGGTCCAG CAGAGAGGGC CACTCTCCTT TTTTCTTTC TTTACTCCCT      240
TTTTGATTCT CGAG      254
```

(2) INFORMATION FOR SEQ ID NO:551:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 278 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

```
AGGCCATGAA GGCCCTTTC ATTTCTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT      60
CTTTTTTTAC TGAGGAGTTA GTCCCATTA GTTCTTGAT CACATTTTCA TTGCACGAC      120
ATTACTCGCA GGTGGTGGG AGCCTGGGCT TTTGGGGAAC CAGGCTGCTC TGGTCCCCAG      180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTGCCTCCC TTACCCTCAT TTCCAAACC      240
TCTTGTAACC TCCTCTCCCT CCCCAGCTG GCCTCGAG      278
```

(2) INFORMATION FOR SEQ ID NO:552:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GAATTCGGCC	TTCATGGCCT	ATGCACTTCT	TCTTTCTCTC	CTCCTTTTGC	TGGGTGCTTA	60
CCGAGGCCTG	GCAGTCCTAC	CTGGCTGTCA	TTGGGCGGAT	GCGCACCCGC	CTCGTTCGCA	120
AGCGCTTCCT	CTGCCTGGGC	TGGGGTCTGC	CTGCCCTGGT	GGTGGCCGTG	TCTGTTGGCT	180
TTACCCGAAC	GAAAGGATAC	GGTACATCCA	GCTACTGCTG	GCTCTCCCTG	GAGGGCGGCC	240
TGCTCTACGC	CTTTGTGGGC	CCTGCAGCCG	TCATTGTCTT	GGTGAACATG	CTCATCGGAA	300
TCATCGTCTT	CAGCAGCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GCCAAAATCA	AGCAAAGTAT	GAAGAAAGAT	AAAGAAGGGG	AAGAAAAAGG	GAAGCGAAGA	60
GGATTCCCCA	GCATCCTGGG	ACCCCCACGG	AGACCAANCC	GTCATGACAA	CAGTGCAATT	120
GGCAGAGCCA	TGGAACTACA	GAAGGCGCGC	CACCCTAAGC	ACTTATCCAC	ACCCTCATCT	180
GTGAGTCCTG	AACCTCAGGA	CTCTGCCAAG	TTGCCGCAGA	GTGGGTTAGC	AAATGAAGGA	240
ACAGACGCTG	GATACCTGCC	TGCCAATTCC	ATGTCTTCTG	TAGCTTCAGG	GGCCTCTTTT	300
TCCCAGGAAG	GAGGGAAAGA	GAATGATACA	GGATCAAANC	AAGTTGGAGA	AACATCAGCA	360
CCTGGAGACA	CCTTAGATGT	CACCCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GACGGCTACA	CCATGGGCCG	GCTGCTGCGG	GCCGCCCGGC	TGCCGCCGCT	GCTTTCGCCG	60
CTGCTGCTTC	TGCTGGTTGG	GGGAGCGTTC	CTGGGTGCCT	GTGTGGCTGG	GTCTGATGAG	120
CCTGGCCCAG	AGGGCCTCAC	CTCCACCTCC	CTGCTAGACC	TCCTGCTGCC	CACTGGCTTG	180
GAGCCACTGG	ACTCAGAGGA	GCCTAGTGAG	ACCATGGGCC	TGGGAGCTGG	GCTGGGAGCC	240
CCTGGCTCAG	GCTTCCCCAG	CGAAGAGAAT	GAAGAGTCTC	GGATTCTGCA	GCCACCACCA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCGG CCCCACCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CGGGGGCACG TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG                                     327

```

## (2) INFORMATION FOR SEQ ID NO:556:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAAGAAG ACAAAAATGG TGTCCCGAC TTAGTGGCCC TGCTGGCTGT GAGAGACACC      120
CCGGACGAGG AGCCGGTGGG CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCCTGAG TTCGTGGCCA TTGTGGCCTA TACCGACCCC      240
TCGGACCCCT GGGCCCGGAA GGAGAACTCG AG                                     272

```

## (2) INFORMATION FOR SEQ ID NO:557:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTTCAA GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTACC      180
CTATCCCACT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCCAC CCTTGACTCC CGTTCTCGAG                                     280

```

## (2) INFORMATION FOR SEQ ID NO:558:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTTG GCTGGCATCT      60

```

GGATGGACTC CAGCATTTGC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT	120
ATCCAGAGGC TGCTTCATGG TGTATGGAG CAATTGGGCA TTGCCAGGCC CCGAGTGGAA	180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCCAGA GCATTGAAGG TGGAGCTCAT	240
GAAGGACTTC AGCATTTGGG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT	300
GGAGACAACA TTCCTAAGGA CTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC	360
TGTCTGTTG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG	420
TTCAGTCGAG AGTTCCAGTT GCACCAGCAT CTCTTTGATC CGGAAACACT CGAG	474

## (2) INFORMATION FOR SEQ ID NO:559:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

GAATTCGGCC TTCATGGCCT AATTTTTTTG TGTTGTTTC CTTTTGTAT TTTACTGATA	60
TCACCAGGAT AGTTTACTCT CTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA	120
CATACACACC CACAAAAATG CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC	180
ACCGTCCCCC CCTCCTCCTA CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG	240
ACACCTGGGC AGACCCGCCG GCTCTCCCCC CACCCACCC CGTCTCTCGAG	290

## (2) INFORMATION FOR SEQ ID NO:560:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GTGTATGTGG GGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTTGTGTGT	60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA	120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA	180
CGGCCCTGCA GTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC	240
TCACTGGTGT CTTTTCCTCT TCAAATCTAC AGCATTTCTG ATCTCTGCAA ACAATTTAAC	300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA	360
G	361

## (2) INFORMATION FOR SEQ ID NO:561:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GTTCTAGACC TGCCTCGAGA TATGCCGGA GGTGTCATGG CTGGTCCCAG GGCCAGCACA	60
--	----

```

GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTAACT TTATTTCTG TTTTATGAGT    120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC    180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG    240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT    300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCTTTT TAAACAAAA TGCCCTCGTT    360
TGTAACCCCT TAACGCTCGA G                                     381

```

## (2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTTGATTC    60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTTATCCACC CTGATTGCTT    120
ACTGCTCTTT GAAATACAAC CAGTGTTCAC GCCAGACTGT TTTCTGCTT CTGCTCCCTT    180
TCTCCTCCTC CCAGCACATC TGTGAATTCT TTGACTGGTT TACCACTCCC AACTCCTCC    240
CCAGCAATGC AGATCTTCTA CACCTTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC    300
CTCCCGAACA GCTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA    60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCTT CATGTACAGA GCAATTGACA GCTTTCCCGG    120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTTCTTC CTCGCCTGGC TTGTGAAGAA    180
CGTGTTTATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT    240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC    300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC GCGCCCCAGC    360
CTGCCTCCAG AAAATGATGC GGTCACTCCG TTTCCACATG TTCATCCTGA GCATGGTGAC    420
CGTGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG             472

```

## (2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCGG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TGCGTGAGGT GCCGGAAGGA CTGCGTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

```

## (2) INFORMATION FOR SEQ ID NO:565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTTGAGC TTTTTCCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CTTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACTA      240
ACACAGAGCC AAAGACAAAA ACCACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTGTT ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTGG TTCTTTTTTT      60
CCATGTCACCT AAAGGCCAAA ACTGGAACCA AGGATTTAAT AACTATTATG ATCAAGGATA      120
TGGAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTTACTGGG TATAACTATG GGAACATATG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTATAGT CTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATACT TCTGATAATC ATAAAGGCAA TTCAACCCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG	300
CTCGAG	306

## (2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT	60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACTTGC	120
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT	180
GCAGATTGAC TGAAGAGAG TTGAAAAGA TGTAATAAAA GCAAAAAGAC AGATTAAGAA	240
ACGAGCTCTC GAG	253

## (2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 544 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC	60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGCGGTC	120
GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA	180
GGAAAGTCGA CAGTGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG	240
AAAACCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG	300
TCGCCATAAA GTATGCATTG CTCAAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG	360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT	420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA	480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT	540
CGAG	544

## (2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT	60
CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA	120



```

GAGTCCCAAA CTCTGAACA CGAACTCTTT CTAGACACCA AGATATTTGA AAAAGACCAA    180
GGAAGTACAT ACAGTGGTGA TCTTGAATCA GAGGCAGTAT CTA CTCCACA TAGCTGGGAG    240
GAAGAGCTGA ATCACTATGC CTAAAGTCA AATGCTGTGC AAGAGGCTGA TTCAGAATTG    300
AAGCAGTTCT CAAAAGGGA AACCTCGAG                                     330

```

## (2) INFORMATION FOR SEQ ID NO:571:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```

GAATTCGGCC TTCATGGCCT AAGGGAAAAC ATTTTGCATG TGTAAAGCTT CATGAAGTTC    60
TCTTTAAAAA ATACCAAAGC TTGTTTATTT CTGATAATTA ACCTAAGCCC TTATGAAAAT    120
AAACAAAATG AAGGGATTAT GACAGGTATT ACCAAAAACA CAAAAGGAA CAAAGGGGCC    180
TGCGTTAAAA CCTAATTGCT AATGCTTCAC AACTAGGAGA GCATGCCGTC TTGATGTTTA    240
AAAAACCCAG GGTCTCCACC CTTCTTTTGA TTTGTGCAAT TCTGTCTTCC ACAGTTCGGG    300
AGCTTACTCG AG                                     312

```

## (2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

```

GAAAATGTTT ATGGCCGCGAG CAGGAGTAGA GGTCTGAGC CTCCTATTTT TCTGCATCTA    60
CTGGGGTCAA TATGCCACCG ATGGCATTGG CAACGAGAGT GTGAAGATCT TGGCCAAGCT    120
GCTCTTCTCC TCCAGCTTCC TCATCTTCCT GCTGATGCTT ATCCTCCTGG GGAAGGGATT    180
CACGGTGACA CGGGGCCGCA TCAGCCACGC GGGCTCCGTG AAGTTGTCTG TCTACATGAC    240
CCTGTACACG CTCACCCATG TGGTGCTGCT CATCTACGAG GCGGAATTCT TTGACCCAGG    300
CCAGGTACTG TACACGTATG AGTCGCCGCG CGGCTACGGG CTCATTGGAC TGCAGGTGGC    360
GGCCTACGTG TGGTTCTGCT ATGCTCTCGA G                                     391

```

## (2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

```

GAATTCGGCT TCATGGCCTA AAAAAAATC CAGAAAAAAA CAACAGCGCG GTGGTGGGGT    60
TTTGTTAATT TCGCCTTTT TTTTTTTGC ACGCGCCACG AAATTCAGGC TGC GTTTAGC    120
TCCTGAGAAA TATCCAAAGT AATTGCAGAT TGCGGAGACG CACAGCATTA GTTCAAAAAA    180

```

GACCCGAGGC ATTGGGGCAG GGTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC	240
AGGAACCTGC AAACCCACGT AGATTTCAC TACAACCTTC CCTTTCTTC TGGCTAGCCA	300
TCCAGCGCTC TCCATGGCAC TGCATGGCAC AAGTTGCTTC TGATAGTCTT TTAAGTTTGC	360
TAAGGGAACCT CCTCGAG	377

## (2) INFORMATION FOR SEQ ID NO:574:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC TTCATGGCCT ACAGCCTCAA GTCACTCCCA AGCCCCCTCC TTGTCTGTGC	60
ATCCGGGGGC AGCTCTGGAG GGGGTTTGCT GGGGAACTGG CGCCATCGCC GGGACTCCAG	120
AACCGCAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGCC GGCTCTCTAT AGCACCAGGG	180
CTCAGTGGG AACCCCCCTC CCACCCTCGC GAGTCTGTTT CCAAGGAGGA GAAGGAGCAG	240
AACTATGACT TAACTGAAGT CTCAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC	300
CACAAGGGAG CAGAGCTGCC TCGAG	325

## (2) INFORMATION FOR SEQ ID NO:575:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 438 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTCGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA	60
CCACACCCCG CTGGGAAATA TCTTAAAGA ATCAAATAA GAAAGTACT CTACTTAAAT	120
CGTGTGCTTT TTCTGTGTGT GATTTATGGT AATCTTACCA TGGGTATCT GATTACTTTA	180
GAAAGATCCA TTTAGCTTAT TTTTTCTTC TTGGGTTAT TTTTCTTC CTTCATTG	240
CACAGCCTCC CCCCAAATAA AAAATAAAGA TATAAGTCT ATCTTCTCCC TCTTGTCAGT	300
TTAAGTAAAA AGAAGTTTGT CTTCATTTT AATAATAGAA TTTGTGTGTA TATAATATAG	360
GCAAGTATTT GGCCTCAAGC TGAGTTTGA TTTGAAAAGA TGAGAATATT AAAGCTTGTC	420
AGCCAGCCCA CTCTCGAG	438

## (2) INFORMATION FOR SEQ ID NO:576:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 510 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTCGGCC TTCATGGCCT ACTGTNTTCC ATAAAGGCTG TACTAATTC CATTCTCACC	60
AACAGTTCAC TAGGTTCC TTTCTCCAC ATTGTTGCCA ACATTCTTA TCTTGTTT	120

```

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTCG      180
ATTTCCCTAA CGGTTGGTGA TACTGAGCAT TTTTGCATAC ACCGGGTCAT TTGTTCTTTG      240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTTGTGTCCC      300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG      360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG      420
CTCTTTTGCC CCTCCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA      480
AGCCCCCTC ACCAGACACT GTATCTCGAG      510

```

## (2) INFORMATION FOR SEQ ID NO:577:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA      60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT      120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGT TATTGCCTTT TAGTCACAGG GATACACCTT      180
TTATTCATTT ATTTATTTAT TTACCAGTCT CATTTAGCAG TAGGAATGCA TCTTAGCATT      240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG      276

```

## (2) INFORMATION FOR SEQ ID NO:578:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAAATGTT TGAATGCTAC      60
TTGTCTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTTTATTT GCAACCAGAA      120
TGCTCTAGTT CTACAGATAG CCTGTCTGG TATACGTCTA CTTCACTGGA CCGAAACACC      180
TTGGAAAATA TGCTTGACG GGTTCCTCTA GTAAAAGATA TTTATGATAA AGACAATTAT      240
GAAGTGGAGG AAGACACTCG AG      262

```

## (2) INFORMATION FOR SEQ ID NO:579:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTTAAGAG AGTTTGACTA AGAAAGAGCT      60
GTTTGAAACC TCCTGGCTTA TGTATTTTGA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG      120
AGTAGAGTTT GTGCATTTGC AGTATAAGAT TATCATTATC AAACATTTCCT ACTAGGCCTT      180

```

TCTCCTCAGC	CCCTAAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACTTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTCGGAATC	360
ACTCACCTCG	CCCCTTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

## (2) INFORMATION FOR SEQ ID NO:580:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGACT	TGCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

## (2) INFORMATION FOR SEQ ID NO:581:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 740 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGGTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTTGTGCCC	CGTATTGTGT	120
GCTGAACTCC	NGTCTCATCC	TGTGACTAAG	ATTGCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCCT	TTTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TGCGAGTGGA	ATCCATTAAA	AGATGTAAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TTACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCACCTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTACAAA	600
GTTAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACCTAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

## (2) INFORMATION FOR SEQ ID NO:582:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCT TTCATGGCCT ACAAAGGGGT AGCAAGGCAT GTCTTACATG GTGGCAGCAG      60
AGAGAGAGAG CAGGGAAAAC TGTCATTTAT AAAACCATCA GATCAGTTGG GTTGTGCAAA      120
TGGTGGAGAA GAAAACCTCA GGAAGAGTGC ATAGACTGAG CAGAGAAGAG GACCAGCTAC      180
CTCCGTAGAG GCAGGGAGAG CAGCCAAGCT GGAGCCTGAG CAGCATTGCT GGACATGGAG      240
AAGGTCTGGA ATCTTGTCAG GGAAGCAAGC AAAGGGTTTC TTTCTATTCA ATGAAGTCCA      300
CTCCCAGGAC CCTGGGCAGC AACGGGTGCT GGACTGGGCC ACCTGGCAGC GTCACATCAA      360
CTGGCAGCTA GAAGTCCTGG AGAATGACAA CTTCCAGGAC GACCCCCATG TGGGACTCCC      420
TCAGCTCAGC AAGAGACTGC CACAGTTCGA TGATGATGCA GACACCAGAC AGTAAAAGAA      480
GAAAACTCGA G                                     491

```

## (2) INFORMATION FOR SEQ ID NO:583:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC AAAGAGGCCT AAACAGTCCA GAGAGGCATA AATCAGACCC AGTTCCTAGC      60
TGGCTTGTCC TTATCAAGTA AATGGAAAAG GGGCCAGGCC AAAGCAGGGC AAGATGACCT      120
TGGACTTGGG AGAGACTTGG ACTCATGCCA CAATCCTAGG GTGCCCCACTG GACCATTGCT      180
TTTCTGAGTT TTGTAGTCAT TCGGTGTCTG AAGTAAGGTA GATTGAAGTG AGGCCTTCGG      240
TTTCCATCTG GACCCTTTCT CTCCTGTTTT CTTTTTTTCC GCCTTGTCCT AGGGATGTTC      300
AATAGCCAGG AAATGCAAGC CCTCTCCAG CAGATCTCTG AGAACCCCCA GCTGATGCAG      360
AATGTGATCT CAGCACCTTA CATGCGCAGC ATGATGCAGA CGCTTGCCCA GAACCCCGAC      420
TTTGCTGCTC AGATGATGGT GAATGTGCCG CTCTTCGCGG GGAACCCCCA ACTGCAGGAG      480
CAGATCCGCC TGCAGCTCCC AGTCTTCCTG CAGCAGATGC AGAACCAGCA GTCACTCTCC      540
ATCCTTACCA ATCCCATAC CTCGAG                                     566

```

## (2) INFORMATION FOR SEQ ID NO:584:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GAATTCGGCC TTCATGGCCT AGTTGAAAAT GATCATTACA CAATATATTC CTAAACATAA      60
ACTGAGTAAA CTTGAAACAG CTCACTGTGT GGAGAGGACC ATTCCCGTTT TGCTCACCAG      120
AACTGGAGAT TCTTCTGCCC GCCTCCGCGT CACAGCTGCA AATTTTATTC AGGAAATGGC      180
CTTGTTTAAA GAAGTTAAGT CTCTCCAAAT TATTCCATCC TACCTGGTGC AGCCATTGAA      240
AGCAAACCTC TCAGTTCACC TGGCAATGAG TCAGATGGGC CTCCTGGCCC GGCTGCTGAA      300
AGACCTGGGC ACTGGCAGCT CGGGCTTCAC CATTGACAAC GTGATGAAGT TTTTCAGTGAG      360
TGCCCTGGAG CATAGAGTGT ATGAGGTCCG CGAGACGGCG GTTCGAATTA TTTTGGACAT      420
GTACAGACAG CACCAGGCTT CCATCCTGGA GTACCTTCCT CCAGACGACA GCTAATCTCG      480
AG                                     482

```

## (2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```
GAATTCGGCC AAAGAGGCCT AATAAGGTG TGGAACTTC ATTCAATCAT ATCTTCAACA      60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC      120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTAC      180
TATCTTCCA CATTCTCTAT TATTTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA      240
ACTAATACTC ACAGGGACAC TCGAG                                         265
```

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```
GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA      60
TTGGAATATT TAAGTATTG CATAAAAAAT CAAATGGTAG TGTTTGTAA TCTCTACTGT      120
```

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 503 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```
GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA      60
AAGACAATTT AAGAGAAGAA CTAAGAAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA      120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG      180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA      240
TGGCCCAACG GATGGAACAG GCCAACAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG      300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG      360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA      420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCAGCT GTATGAACT AAGGAAGGCG      480
AAACGACTAG ACTCACTCTC GAG                                         503
```

(2) INFORMATION FOR SEQ ID NO:588:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 567 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```
GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTTCAAGG ATTCAGTCAC AGGTCTGCCT TAGTGCCTA    300
GCCCTATAAC AGTAACTAT TCACTTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATTT    360
CCTGTACTGC CAAGGGAATT ACTTTCTAA AATTAGCTAA GAACTTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATTT TAATTCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGTCCTTTT AAAGACACTA GATTTCATCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATTCCCT ACTCGAG                                567
```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```
GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTGTATC TTCTTCCCCT TCTTTTCTTC    60
CCCTTCTTCT TTCCTTCTTT GATCTTCTTC CCCTTCTTTT CTTCCTTCTC CCCTTCTTTT    120
CAATTTCTCC CACGTCAA                                138
```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```
GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAATGAAAT CTGATTCTTT TGCTCCCAA ACTGATTCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGACTTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTTAT GTCTAAAGTC ATAGGTGCAA ACAAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CCTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420
```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTTGCTGGTG AGATCAGAGC CCTCCTGAGC      180
AGGCAGCGCC ACTCCAGGGT TCAGACAGGG CTGCACAGGC GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAAACTG AAGGCATTTT TTTTCTTCTG CTGCCTTTCC CAAAGTGGTT AGGTTTGGAA      360
AAGAGATGAT GATGGTAATA TTTATTTGTG CTTTTTAAGC CATTTCCCCA AATGGGACTA      420
GCATGCTTGT TTTTCAGTATA CCGTGGCCTG CCTCATGATG GTTTGGAGAT ACTGTCTGTG      480
GATGTGAGGT GGGGACTTCA TTCAATTGTCC TATTTCTATC TNCACCTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGGTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T                                                                611

```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAACT GCATGGGACA GACTGAGTTT TGTTCTCTCTC      120
TTCCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCCAGTA TGTCATGTGG CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CCTTTCAGGG TCCTTCAGCT GTGAAAGTGG AGCATTTCATA      240
TCAAGACTAC ATCTTTCCTG TTCAGCTTTC TTCAGCCTTG GAGGAACCAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AACCCTATTC ACATAACTTG      360
TGAATATGTT TTCTTTCCTT GGATTTTGGC AAATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTTGGCC GAA                                                                443

```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```

GAATTCGGCC AAAGAGGCCT AAAAGCATTG AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAAACA      180
TTTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGAAAAAAGA      240
GGTAAATCTT ATAAGCCATC TTCAAGATTG GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCTTCTTGTG ATAGAAACCA AAAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAACCTTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G                                                                441

```



## (2) INFORMATION FOR SEQ ID NO:594:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 562 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```
GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAACTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAAATCA AGATTGTGTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTTCTTTCTA TTGACACTGA GAGGAGACAT CTTCCGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAATCTCG AG                                     562
```

## (2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```
GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTTCT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCCT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCCTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAAAGTGT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACCTTC TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCACAAG TGTGATTCTT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                     426
```

## (2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```
GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180
```

```

ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC      240
AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC      300
AGAAGAAGAA GCCGGATGGG TTCTCGAG                                     328

```

## (2) INFORMATION FOR SEQ ID NO:597:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

```

GAGAAGTGCAG AGAGGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCAG CCCACAAAAA      60
TGCAGTGAAG AAGAAGATAT ATGCATATGT TTAAGTTAAT ACAATTGAGA TACATTTAGC      120
AGACAGAATC AATAGAGTTG ATGAGTGACT GACTGGATGT GTGGGGAGTT TATATCACTC      180
CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG      240
AACTTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG      300
CTGGGCATGG GATGCACAAA TGGAAATTCC ACTGGGTCTG CAGCTCACAC ATAGGCATGA      360
CCAGCATAGA GATAGAGAGG CCCAGTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG      420
CATCAGCTGA GAAGGGAAGG AAGCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA      480
TAAGAAGCCC ACAGAAGACA GAGAAGGAAC AACTAGAAGG AGGCTCGAG                                     529

```

## (2) INFORMATION FOR SEQ ID NO:598:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA      60
TAGTATAAAT AAAACTCTGA AGCAAGATGA TGTAAGGAA AAAGATGGTA CAAAATAGC      120
ATCTAAGATT ACAAAGAAC TTAAACTGG GGGAAAAAAT GTTTCTGGAA AGCCCAAAAC      180
TGTAACAAAA TCCAAAACAG AAAATGGTGA TAAGGCACGG TTGGAAAACA TGTCACCTAG      240
ACAAGTTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTTACT      300
AAATGGAAAA GGAGTGAGAA ATCAGGAAGG GCAAATTTCA GGTGCCAGAC CCAAGGTACT      360
CACAGGAAAC TTAAATGTGC AAGCCAAAGC AAAGCCTTTG AAGAAAGCTA CAGGGAAGGA      420
TTCACCATGC CTCAGCATCG CAGAACCCTT CGAG                                     454

```

## (2) INFORMATION FOR SEQ ID NO:599:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGGTCCTCAA GCATTGCTTC AATATCAATA TCGTCTGCCA      60
TTTTCTCTAA ACGCCTGTTC CGGCCTTCGG GCGCCTGTGG TGCTCGTGTT CGGGAAGAGA      120
TTGCTGCTGC TGCTGCTGCT GCTGCCGCCG CCGCCGCTTC TGTGCTACT GTTAAGCCCC      180
TAGGCCCCAGG CCGCGGAACC GCCCAGCCCC AATATCGGGT TCCAAGGACG GCTAGGCCCG      240
AGAGAATCTA AAAAAACAA TGGAAATAGA GAAGCCCACG CGGGAGAGCA GGACGGCGGC      300
TTCGGCAGCT CAGGATCCAC CCCNGCGACA GCGTCGACAA GTTCCCTGAA ATGGCGGCCG      360
CTGCTTCCCT GTACTCANAN TCCACCCCC GAATTCTAGA CCTGCCTCGA G              411

```

## (2) INFORMATION FOR SEQ ID NO:600:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AATTAAGCCT GCCTACTTCT ACAATGCATT CTGTTACCTA      60
TTTGAACAGT ATGTTTGTAA CTATGGCAAT GAAGTCAGTA GATAGGAAAC CAGTTATTCC      120
TTCTACCTTT AAAAATTTTG AGAAGTTGCC AACCAGGGAC TAAAGCTATT ATCTTGAACA      180
GAGTCCCTAA AGCTAGTCTA GTTTTGGCCA CATCTGCAAT GATTATTGTT TAATTTCAAA      240
AGAATCCCTA GGCTCTACAA TCTAGGGGTG GTAAATGTGT TTCCACTATA CTTGGGACCG      300
CTCGAG                                     306

```

## (2) INFORMATION FOR SEQ ID NO:601:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GAATTCGGCC TTCATGGCCT AGGAATCTCC TCTTAAACCA GGTGAAGTGG GAAAGCAGGG      60
ACCATACCAC CCTGAGTGAC ATCTACCTGA ATAATATCAT TCCTCGATTT GTACAAGTCA      120
GCGAGGACTC AGGAAGACTC TTAAAAAGA GTAAAGAAGT CCGCCAGCAG CTCCAAGATG      180
ATTTGATGAA GGTCTGAAC GAGCTCTACT CGGTCATGAA GACATATCAC ATGTACAATG      240
CCGACAGCAT CAGTGCTCAG AGCAAACTAA AGGAGGCGGA GAAGCAGGAG GAGAAGCAAA      300
TTGGTAAATC GGTAAAGCAG GAGGACCGGC AGACCCCATG CTCCCCTGAC TCCACGGCCA      360
ACGTTTCGCAT TGAGGAGAAA CATGTCCGGA GGAGCTCAGT GAAGAAGATT GAGAAGATGA      420
AGGAGAAGCA CCAAGCCCTC GAG                                     443

```

## (2) INFORMATION FOR SEQ ID NO:602:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 585 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCGGCT	TCATGGCCTA	CAACATGTCA	GTTTTTTTTT	TCATTTTCCT	CAATATTTTT	60
CTTCTNGCTT	TCTCTTCTCC	TGGTTCCCAG	CCTCTACTCA	ATAGTCCCCC	CAGCTTTGTG	120
TGCTGGTCTC	GGGGCTTCAT	GGAGATGAAT	GGGCGGGGGG	AGTTGGTGGA	GTCACCTCAAG	180
AGATTCTGTG	CTTCCACGAG	GCTTCCCCCC	ACTCCTCTGC	TGCTATTCCC	TGAGGAAGAG	240
GCCACCAATG	GCCGGGAGGG	GCTCCTGCGC	TTCAGTTTCT	GGCCATTTC	TATCCAAGAT	300
GTGGTACAAC	CTCTTACCCT	GCAAGTTCAG	AGACCCCTGG	TCTCTGTGAC	GGTGTCAAGT	360
GCCTCCTGGG	TCTCAGAACT	GCTGTGGTCA	CTTTTCGTCC	CTTTCACGGT	GTATCAAGTA	420
AGGTGGCTTC	GTCTGTGTCA	TCGCCAACTA	GGGGAAGCGA	ATGAGGAGTT	TGCACTCCGT	480
GTACAACAGC	TGGTGGCCAA	GGAATTGGGC	CAGACAGGGA	CACGGCTCAC	TCCAGCTGAC	540
AAAGCAGAGC	ACATGAAGCG	ACAAAGACAC	CCCACACATC	TCGAG		585

## (2) INFORMATION FOR SEQ ID NO:603:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC	TTCATGGCCT	AGTCTGGTAG	TAAGGTGGAG	TGGGTTTGGG	GCTAGGTTTA	60
GCTCGGGGGA	GGTGGTGTG	GGGGCCGAG	GCTGCGCGGT	GCCTGGGTAC	ATCTCCAGGC	120
CCACGCCCGG	GGCTTGGGAA	GTCACATCCA	TGTCTCTGCG	CCGTGCAGCT	TTCAAGATT	180
GCCGAAAGGC	TCCAGAGCT	CTGTTTTAAA	TGGTGAATCC	ATCTTTAGAA	AGAAGCGTGA	240
TTCTCCTTGA	AGTGAGCCTG	GCATTTGTCA	GACAGGAAAC	TCCCCAGGAG	GAGCACCTGT	300
GGTGGTTTGG	GTTGGGTTTG	TTAACTGCAG	AGAGTGGGAA	GAACAGATGC	TCCTCACACC	360
GTCTCGAG						368

## (2) INFORMATION FOR SEQ ID NO:604:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AGGAAAGACC	ATCAGCCTGG	GAGTCAGTGA	ACCTGACTCT	60
GATCCAGCT	CTGCCTCCAN	TCAGCTGTGT	GATGACAGGT	AGGTACACCT	CCCTCTCTGA	120
GCCACAGTTT	ATCTGTCTGT	AAACAGGGGT	ATTGGACTGG	ATTCTCTGTT	ATCTCTCATG	180
TCTCTGTGAA	AGGTCTGTGT	TTTCAAATAC	TCCTTAGGGA	CATGACCTCA	CATAGAAAGA	240
GGGGGTGCCA	CGAACTGGAT	TCCCAGCACT	CCCCCTTCCC	AGCTCTGCTC	AAGCTGAGGG	300
ACCTTGGAAC	ATGGTACTTG	GACCTAAGTA	CTCTCTCTGG	GCTTCAGTGT	CCCCAGCTAT	360
AAAATGGGGG	AAATGCCTAA	CTCAGGAGGT	TGAGGTAAGG	ACAAAAGGAA	TTAATACATG	420
GAAAGTGCCT	GGAACAGTGC	CTGGCACAGT	CTGCTTTCAG	AAAAAGCTGC	AAGGTGGCTA	480
CTCTCAGCAG	ATATAAGTTA	ATGCAGGAAC	AGCAACTAGC	AGCTCTTGGA	CATGCAATAT	540
ATTATATATT	TTTTGCATCT	TTTACCCCTC	ACGGCACTGA	GCCTCACAAT	CCGTTGACCT	600
CGAG						604

## (2) INFORMATION FOR SEQ ID NO:605:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

CGCAGCCAG	CGCCTGCCTC	CGACTCGACT	CCACACCTGC	TTGCTACAGC	GGGTGAGGAA	60
GCAGGAAAGG	GGGAGGGAGG	GATGTCGTCT	GGATTCCTGT	AATAATTTGT	TTCATTGTTT	120
CCAATCGACT	TAGTCACCAG	GTAAATAGT	AGCATAGACC	TTTCAAAAAA	GTAAGCTAGCT	180
TATAAGTAGA	TGTATTGAAA	ACACCTGCTT	GTTGAGTCGT	AGACAATTCC	TCATTACTAG	240
TGTGAATCT	AGGGGGTGAA	ACACGGGCGG	AGAGCGGCTG	TGAGCTCACG	CGGCTCCATC	300
CCCACAGCGG	CCCAGGGTCA	CTCGGGGCCA	TTAATCAGGC	CGCAGAGCTG	CCCTCTGAGC	360
CGGGCCGCCA	GCGCCACAG	GGCCCAAGCC	AGGGCTCCCT	GGGCGGGATG	TTTTAAATCG	420
CACAGGGACA	AAGGAAAGGA	AAGACGCTGG	GGCCCAAGCC	CGAGCTTATG	AAACGTTATC	480
AAGGAGCGAC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 331 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCT	TCATGGCCTA	GACTTCCAAG	GACATGCTTC	GAAGCTCTGGC	CCAAGCCAAAG	60
AAGGAATGCT	GGGATCGGTT	CCTCCAGGAG	AAGTTAGCTT	CAGAGTTCTT	TGTGGATGGA	120
CTTGATTCTG	ATGAGAGGTG	ACTACAATTG	CAAAGTAGAA	TTTGCTTTGA	CACCTGATGC	180
CAGGACAATA	GTATGTTACC	ATCCTTCTAT	AGACATTCCA	TATGAACGCA	CAAAACCTAT	240
CCCTTGACCA	GATCCTGTGT	ATAATAATGA	AGAAACACAT	GGTCAAGTGC	TGAAACTAG	300
AGAAGAAAAA	AGTGAACACC	TGGAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 632 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTTATGGCCT	ACTGCCTCGG	CCTCCCGAGT	AGCTGGGACC	ACAGACGCCC	60
ACCACCATGC	CCGGCTAAAT	TTTTGTATTT	TTAGTAGAGA	CGGGTTTCAC	CGTGTAGGCC	120
AGGATGGTCT	CGTTCTCCCG	ACCTCGTGAT	CCGCCCCGCT	CGGCCTCCCA	AAGTGCTGGG	180
ATTACAGGCG	TGAGCCAAC	CGCCCGGCCA	GGAATCCCTC	CTCTGTCTGA	CCTAACTGCC	240
CTCTGCCCTG	GAGCTGCTCA	GCCTCTATCA	ATTTTTCTGG	CTCTCAGCGA	ACGTTTTCAT	300
TCAGTTGCAA	GACACAGAAA	CTCAAATTCA	AACCTGCTTA	CACAAAATAG	TGAATGTAAT	360
GGCTCATGCA	CTTTTAAAG	AGATGAGGTC	TGTTGTGCTG	CCCAGGCTGG	ATGTGAACTC	420
CCGGGCCCAA	GAAATTCTCC	TGCCTCAGTC	TCCTGAGTAG	CTGGGACCAC	AGGAGCATGA	480
CTGTAAGTCC	TGGTGTGAAT	CAGGCTCCAG	AAACAGCTTG	ATCCTGGTTC	CCAACAGTAT	540
GGTCAAAACT	CATTCTCTCT	TCTGTCTTCT	TCTCTATGAC	AGGTGCTCCC	TAAGAAGTGA	600
CAAAGAAGGC	CACAAACAGC	TCTGGGCTCG	AG			632

## (2) INFORMATION FOR SEQ ID NO:608:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGNTGA AAATAAGAAA AAATATTTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTTGCTGATT CTGAAGTGGG TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAG      360
AAACGAGAAC TGGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAGAACAT GCTAGTCAAG GAGACCTCGA G              531

```

## (2) INFORMATION FOR SEQ ID NO:609:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCAATGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCCATG TGGCTGTTGA GACTTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTTAAA TTAAATAGC      300
CAAATGTGGC TAGTGGCTGT TGTACTCGAG                                330

```

## (2) INFORMATION FOR SEQ ID NO:610:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTTCAGG TTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATTT AAGTCAGACT CGGGCCGAAC TCGAG                    345

```

## (2) INFORMATION FOR SEQ ID NO:611:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 633 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGGC GCCAGAAGCA ACCCAGGCCA CCCCAGCA GAAGGAGGAG GCCCGAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAGA GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCTGCTG CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCCAGAAG CCGGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCGAGTG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCCGAGGA GTTGGAGGAG GAGTGGACGC CTACGGAGAA AGTCAAGTGT CCCCCCATG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGATCCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCACTC GAG                                     633

```

## (2) INFORMATION FOR SEQ ID NO:612:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTCATGGCT TGGTAAGGAA ATTTTAAGCA TTCCTTCAAA      60
GATTGACGTG CTAAAATAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTTAGC      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGGAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAGAAAA AAAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CACACTGTTA CTCGAG      296

```

## (2) INFORMATION FOR SEQ ID NO:613:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTACTATGAA ATGACAGCTC CACTTCCTAA TAGTGCATCC      60
GTGTCTTCTC CACTGAATCA TGTTCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG                                     268

```

## (2) INFORMATION FOR SEQ ID NO:614:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGGAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AAAGTGGGCT      60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAAACACCC      120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTGGGTACG      180
GGCCTGCCCA GATCTTGGGA ATGTGGGCAG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG      240
ATGAGTCATG GTATCCTCCC GGCACCCTCG AG                                     272

```

## (2) INFORMATION FOR SEQ ID NO:615:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 521 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTGT TAGAGACGGG GCTTCAGCAT ATTGGCCAGG      60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA      120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG      180
ATTCTGGCTG TGGAAAGACCC CAAGATTCTT TGGAAATTGT ATGCTTTATT TAATTTAGAG      240
ATTATCTTCT CTGTCCCACT CTTCCCTTTC CTAAAAGGA CTAGATGCTT GCTGCTTAAT      300
TAGTAAAGCA AATTTAAGAT AATTTCTGCT TTTGAGATT AGGGATAGAT TTTTAAACAT      360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAA TTAGGAAACT TGAACCTTTA      420
TTTGCACAGA CTGAGAATTA TGAAGTGGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA      480
TAAATCACAA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521

```

## (2) INFORMATION FOR SEQ ID NO:616:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 577 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCTG GCCCCATGA      60
CTGCCCCCTT CCCTCACACC CCCCAGGTTG CTCCAATGGT TATGTCACGT TGCTTGCCAA      120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT      180
GGATTATCCA AGGGGCCAGG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG      240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCTTCC      300
AGCATGGAGC TCGGGAGAGG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA      360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC      420

```



ATTTCTGGTA ATTTGCTATA TAAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA	480
TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC	540
TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG	577

## (2) INFORMATION FOR SEQ ID NO:617:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT	60
ACCAAAATTC TCTTATCAAC TGCATACTAA GTGTTTTCAA TACAATTTT TCCGTATAAA	120
AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAGA TATTTCTAGG CAATTACTAG	180
GATCATTGAG AAAAAGTGAG TACTGTGGAT ATTTAAATA TCACAGTAAC AAGATCATGC	240
TTGTTCTTAC AGTATTGCGG GCCCTCGAG	269

## (2) INFORMATION FOR SEQ ID NO:618:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA	60
ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAAC TGACGAGGAGA	120
TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC	180
TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC	240
CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT	300
GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG	360
AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA	420
GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAAGGAT GGACTCGAG	469

## (2) INFORMATION FOR SEQ ID NO:619:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACTCC AACTGGACA	60
GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT	120
TTGTGTTTAA GAACTTGGTT AACTGGAGT CAGTTGCAGA CCAGAATGGA GAAAAGCACT	180
CTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA	240

TTGGAGGGAA GAGCAGGGGA GGCAACACTA TTTCTCTGG GTGTTAGAAG AAGATTCGAG	300
CTTATTTGGG CACTGGTCTC TATCTTTGCC TTCAGCTGAA TCAACATCTA AGATGTTTTA	360
GATGCTTAGC TAATTCCTCT TAAAAAAGA ATAAGCAGAG GCCGGACGTG GTGGCTCATA	420
GCTGTAATCC CAGCAGTGTG GTCTCGAG	448

## (2) INFORMATION FOR SEQ ID NO:620:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGNC TTCATGGCCT ACTTAAATCC ATCAAGTTAC ACAATCGATC TGTTGTCAGC	60
TGAACAGAAC CACATTAAAT TTAAGCCAAA CACACCAATA GGAATGTTGG AGGTAGAGAA	120
GGTAATTTTA AAGCCAAAAA TGTTGGATAA GAAAAAACCT ACACCTATAA TACCAGAGAA	180
AACTGTGAGA GTAGTGATTA ATTTTAAAGAA AACACAGAAG ACCATAGTGA GAGTGAGTCC	240
ACATGCATCG CTTCAAGAGC TTGCCCTAT TATATGTAGC AAATGTGAGT TTGATCCGTT	300
GCATACACTA TTGTTGAAAG ATTATCAATC GCAGGAGCCT CTTGACTTGA CAAAATCTCT	360
TAATGACCTG GGAATAAGAG AATTATATGC GATGGATGTC AACAGAGAGT CCTGCCAAAT	420
ATCACAAAAC CTAGATATTA TGAAGGAGGC CCTCGAG	457

## (2) INFORMATION FOR SEQ ID NO:621:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 287 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC TTCATGGCCT ACTCTCTGAT TTACAGATTG CTAATTAAAT GGCTATTATT	60
AGTTTGGATT AATTAGACTT AAGAAAACAA CTAAGTGGG GTTTTTTTTG TTTGTTTTTT	120
GAGGGTTTTT TTTGCATGAG AATTGTATGT AACCAGTGAT ATGATTATTC CTGAATGTAC	180
AGACAGAAGT AAGCCTGGAC ATTGTAAAT AGTCCCTGCT TTAAGGGACT ACGATAATGT	240
GTACTATGAC AAACGTGCTT TATTCTTCTA ACGCAGTAAG TCTCGAG	287

## (2) INFORMATION FOR SEQ ID NO:622:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC TTCATGGCCT AGTAGGTGTA TCACAGATTT CTAATGTAGA ATGGTCAGTC	60
CAGGAGTAAT TGTAATTGTG GAAAAATGGA GAATTATAAA ACAAGAATGA TGTGCAAAAA	120
AGGACACAGT TGAATTCATC TGTGTTCCCT TAACTATTT CATTTACTCA TTCATCCAAG	180

TTTTGAAAAA TGTTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG	240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG	300
ACCTACAGTG CTGTGGAAGA TTCTCGAG	328

## (2) INFORMATION FOR SEQ ID NO:623:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 375 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA	60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTTAAAAA AATGTTTCGGT CTTCTAGTTT	120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTA	180
AGCTTTTGGG GAATAGGTTG CAATACATTT CTTGTCTACT GTTTCTCTTA GTGTTTTCTA	240
ATTCTAACCC ACTGTTTTTG GAATTCTAT TAGATGGTTT TGCAACTCT GCATCTATCC	300
TCCATGCACC TTCACATTTC CTTACAGTT TTCGTGCTGT TTCCTTGTG TGCTACATTC	360
TGCACAGGAC TCGAG	375

## (2) INFORMATION FOR SEQ ID NO:624:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 763 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC	60
ACCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAATGA AACTCTGCC	120
GCTGTTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG	180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT	240
ACCACATTAT CCTGGACTGC TAGCTCACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG	300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTTCC	360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT	420
AGTGGCTACA ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC	480
CTTCCAAATG TGACTTTTCT TCCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAATGTT	540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAATT CCCAGCTCC ACAAGACANC	600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC	660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC	720
CTCAGCTCCA CCAGAGACCA CAGCTGCCCC ACCCATCTTC GAG	763

## (2) INFORMATION FOR SEQ ID NO:625:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 476 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCGGCC	AAAGAGGCCT	AGTAGTTTCT	ATGTGCGGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTTCCAC	CACGTTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTTCCT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTTGG	GTGAAACAT	TATTGTGAAC	ACTAAGTTCT	TCAGGTTTGG	TAGCACATGC	300
TTTCATTTGT	AGAGTTCGTC	TAGAATATCG	TTTGCTGGGC	CTTCTTTCAA	AGGATGTTGA	360
TCTTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TTCCCACTAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAAATC	CTGATCGATG	AGAACTCTTT	TGGACGGGGC	CTCGAG	476

## (2) INFORMATION FOR SEQ ID NO:626:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTTCCT	GTAAAATAAA	CACATTGTTT	60
TATATTTTTA	GGGAACAAA	AGTGCTGCTA	TAGGGTTCAA	AGTTTTCCCT	CTGAACACTT	120
TTCCGAAACA	AATTACCCA	AAGACACATT	TTGAATATCC	TGGTCACATC	TTTGGATCTG	180
TAAATATAC	CTTTAGTAT	GGCACCTGTT	AAAATGCAA	GCAAAAACCT	CGAG	234

## (2) INFORMATION FOR SEQ ID NO:627:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTG	AATCATTGAG	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTTAGTGA	TTTCGACAA	TTCAAAAAA	TATTTCTGAC	120
CGCTTGATTC	AGTTCCTAGT	GAATTAGGGA	AGAAGAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCCTGA	ATTCTTCTCT	GTGCTTAAAC	GAACAACAGG	240
ATGTTGAGGT	TCAAAAATAC	TCTCTTCTAT	TTCCCCCCT	TCCTTCCCTT	TTCTTTCCTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGCAACCAG	ATTTCTGAGC	TACAGAAGCTG	420
AAGATAATTC	ATTTATTTCA	AGCCACTGAG	TTTGTGGTAA	ATTGTTTACA	GTAGCAATAA	480
AAATCTAATA	CATGCCTTCT	ATACCAGAAG	TACACATCCA	CGTGACCATT	CCTGTCCTCA	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACGCACACTC	GAG		583

## (2) INFORMATION FOR SEQ ID NO:628:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGTTCCTACT GCCCCCGGGC GGCCTGCACA    60
GAGCTGCTGC CCTCCAGAGA CTGTGAATCC CAAGCCTGAC TCAGTGGACT GCTTCCTGTT    120
CCCCTCCCTC CTCTTCTCA CCTTGTCTG CACCCTCAAG CCTTCTCCA ATGCCTCCA    180
GGAGGATTTG GGGACTTTCT CCCTGGGGCG CCCAGATCCA GCTCGGAGGC CTCACTGGGA    240
CCTGGCAAGG CCTGACCTCC CGCCCAAAC TGTCTCTGTA GCCCCCTAC TCGAG    295
```

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

```
GAATTCGGCC TTCATGGCCT AACCTGTTGC TTCCCTGGG ACTGAAGGCA GAAGTGACTC    60
CCGAAATCTT CTTTCTGGAC TCAGAAGGAA ACCAAAGCAA TTGATGACAC CGCATCCCAT    120
ACTAAAAGCT ATGGAAGAGA GAGCAATTCA ACGAGCTGAA TGTAGGCGGA TCTTGGCAGA    180
GAAGNAGAAA AAACAAGAAG AAGANAAATT GGCCCAAGTA AAGGCCCAAG AGGAGGAACG    240
TCAGAAAAGG GAGGCAGAAG AAAAGGAGGC ACAGCTTGAA AGAAAACGAG AAGAGAAGAG    300
ACTGAAGAAA ATGAAAGAAC TTGAGAAGCA GAAGAGAACT CGAG    344
```

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

```
GAATTCGGCC TTCATGGCCT AGTTCCTCCT TAGGAACAAG GGCAGGACCT CAAACAGTCC    60
AGAGGAGAAG CCTGGGGTGG TCAGGGAAGG CTTCTGGCT GAGAGGACAG GCTTAGGGGC    120
ACCTTGAAAG TTCAGGCTGA CTGGGGCTAG GGGCATGTGG GTAACAGGTT AAAGGGGGGG    180
GGGCTGGAAA ATGCAGACAC CAAAGACCCT TCAATATGAG GCCAAGAAAG GAAGGTTTCA    240
AACAGGGATC ACTCGAG    257
```

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

```

GTTCCAAATC CATGGGAACC AGCACAGGAG CTACAGCAAA TCATGGCACT TCTGCAGTAG      60
CAATTACTAG CCATGATTAC CTAGGACAAG AAACCTTGAC AGAAATCCAA ACCTCACCAG      120
AAACATCAAT GAGAGAGGTG AAAGCGGACG GAGCTAGCAC CCCCAGGTTA AGAGAACAGG      180
ACTGTGGTGA ACCTGCCTCG CCAGCAGCAT CCATCTCCAG ACTCTCTGGG GAACAGGTCTG      240
ACGGGAAGGG CCAGGCAGGC AGTGTATCTG AAAGTGC GCGG GAGTGAAGGA AGGATTAGTC      300
CAAAGAGTGA TATTACTGAG CTCGAG                                           326

```

## (2) INFORMATION FOR SEQ ID NO:632:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

```

GAAAAAATGG AAGAATTGTG TTGTAAGGTA TGGGAAGGTC GGTGGCGAGT GATCCCTCAT      60
GATGTACTAC CAGACTGGCT CAAGGATAAT GACTTCCTCT TGCAATGGACA CCGGCCTCCT      120
ATGCCTTCTT TCCGGGCCTG TTTTAAGAGC ATTTTCAGAA TACACACAGA AACAGGCAAC      180
ATTGTGACAC ATCTCTTAGG TTGTGTATTC TTCCTGTGCC TGGGGATCTT TTATATGTTT      240
CGCCCAAATA TCTCCTTTGT GGCCCTCTG CAAGAGAAGG TGGTCTTTGG ATTATTTTTC      300
TTAGGAGCCA TTCTCTGCCT TTCTTTTCA TGGCTCTTCC ACACAGTCTA CTGCCACTCA      360
GAGGGGGTCT CTCGGCTCTT CTCTAACTG GATTACTCTG GTATTGCTCT TCTGATTATG      420
GGAAGTTTGT TTCCTTGGCT TTATTATTCT TTCTACTGTA ATCCACAACC TATTCTCGAG      480

```

## (2) INFORMATION FOR SEQ ID NO:633:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

```

GAATTCGGCC TTCATGGCCT AGCGGGATCG TATCACTACG CACGTGGCGT CAATGACAAA      60
GACGCCTTCC CCACGGGACA GGCCCTGGGA ACTGCGGGC AAGGTGTGGG CACGGCGGGT      120
CGCCTTCCAA CCCTCCAGGG TCTCCGGTCC TGCCCCCTCT CCAAGACCCA GAGATTCTCT      180
CCATCCGGTG CCTCCGGGAG CCCAGGTCT GGGGAGTGTC TGGCTATGGC GGGGCGGCTG      240
CTTTTtaggg GAGGGAATCC AGCATTTGGG AAACAGATC TGTTCCTCT CTTTCCCTTC      300
CCTCGAG                                           307

```

## (2) INFORMATION FOR SEQ ID NO:634:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

CCTCTGCAAG AAATGCCTAA GCGTATTATC AGGAAGTGGG ATTATAAAAT GTTTCAGAT      60
CAAATTAAGC ATCTACAGGT GAATTAATAT AGAATTAAGC TTAGAAAGCT TAAGTAGAAG      120
TTGAATGAAT TGTGTTTCATT CTTTGAAACC CATTGATTG CAAAACCAAT ATTCCACTGT      180
CTATAGGAGG CAATTCAGAC TGAAAAATAAT TTAGAAAAAA AAATAGTCCA GAAAAAATAA      240
TAGTTCTAGA GATAAATAGG TCATTGGAAG ACTAACCTCT GCCATTAGGG GTTCTAAAG      300
ATAGGCTGAC TCTATCTATT TAATAATTAT TTTGTTTCATT AACTCCTTGC ATATAGAATT      360
GTAAGTATA CCAGCCAGGT ACGGTGGCTC ACGCTGTAA TCCCAGCACT TTGGGAGGCC      420
AAGGCGGGCA GATCACCTAA GGTGCGGAGT CTCTCGAG      458

```

## (2) INFORMATION FOR SEQ ID NO:635:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCACTCTC ACTTTGTACC TCTGTCAGTT ATCTCCTCTT      60
TACCCTTCTT TCAACGAGCA TACCACGGC CCTCCAGCA CCTATGGCCC AAGCCAGTTG      120
TTTGCAAATT TTATACTGTG ACACAGGACA ATTTACACAC ACATACACAG TTTCACTTGT      180
GACATACTTT TTTTTGAGA TGGAGTCTCA CTTTCATTGCC CAGGCTGGAG TGCAGTGGTG      240
TGATCACACC TTATTGCAGC CTCAACTCC TGGGCTCAAG TGGTCTTCCT GCCTCAGCCC      300
CCCTAGTAGC CAGGATTACA GCGTGCACC ACCATTCTC GAG      343

```

## (2) INFORMATION FOR SEQ ID NO:636:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 402 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GTGGATAACA AACAAACAAA TCTGATGCTC CCTGAGTCAA CTGTTTATGG TGATGTGGAC      60
CTTAGTAACA AAATCAATGA GATGAAAACC TTCAATAGCC CAAATCTGAA GGATGGGCGT      120
TTTGTCAATC CATCAGGGCA GCCTACTCCT TACGCCACCA CTCAGTCAT CCAGTCAAAC      180
CTCAGCAACA ACATGAACAA TGGCAGCGGG GACTCTGGCG AGAAGCACTG GAAACCACTG      240
GGACAGCAGA AACAAAGAGT GGCACCAGTT CAGTACAACA TCGTGGAGCA AAACAAGCTG      300
AACAAAGATT ATCGAGCAAA TGACACAGTT CCTCCAACTA TCCCATAACA CCAATCATAC      360
GACCAGAACA CAGGAGGATC CTACAACAGC ACAGAGCTCG AG      402

```

## (2) INFORMATION FOR SEQ ID NO:637:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```

GCTTCCTCGC AGCAAGCGGC TGGAGATAGA GAAGAGCTTA CTGGTGCAGAG CGTCCGTCGA      60
CCCCGTCGCC GCTGACCTAG AGATGGCAGC CGGTCTCACC GACATATTTC AGCATGATAC      120
ATACTGTGGT GATGTCTGGA ACACCAACAA ACGCCAGAAT GGCAGACTCA TGTGGCTCTA      180
TCTCAAATAC TGGGAACTCG TTGTGGAAC TGAAGAAGTTT AAGAGAGTAG AGGAAGCCAT      240
ACTAGAAAAG TAAGACAAGA GTGAAATCAA ACTGCTTTTA GTGACTCGAG      290

```

## (2) INFORMATION FOR SEQ ID NO:638:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```

GTCGAGAAAA TGGGGATAAT GGAGAAATTG TGGGCAAGCT GGCTTCCTGG GAAGGGACTA      60
ATTGAACAAG ACAATGATTT ATCTTTTCGG GGTTCAGAGG CAGCTTGTTA ATTCAATTA      120
TTTTCTTTAT TTTTGCCAC AAGTGTTTGG TTGTCTTTT CTCTGGCTTT TTACCTGATC      180
AGGCTGCAAG CTGCAAGGT GTGGCTTGTG CTGCAGATT GTAAATAAAG ATGACAGGTG      240
AGAGAGACAG TGGTGGAACT GGTAGAGCTT GCACACCCAC ACGGTGTGGC TGCTCGGGAG      300
GCTGTCTAGT GCACCTGCCA ACAGAGCACA GATATCCTCT CTCCTCAT TCAGATTCTT      360
CCTTCCAGCT GTTACTAAA CAGCAACAAA AACACCCTCT TGGCTGTAAC TTGTCAAATA      420
AAGTCCCTGC AAAGTGTATA AGATTTTCCT CCCCACCTC GAG      463

```

## (2) INFORMATION FOR SEQ ID NO:639:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```

GCGAGGGAGA TGGCAGCCTG GGCTTTAGCA GCAGGGAGGA AGGTGAANAA AGAACCGGGG      60
CTTGACAGAG AGGTGGGTTT TGCCTTAAAG GCAGAGACCC CCAACAACCTG GAATGCCACG      120
GAAGACCAGC ATGAGCCTAC CAAACCTTTG GTTCGAGGG CTGGAGCTAA TTCTCGCTCC      180
AGGAGAAAGA AGCAGAAGAA GAACTCCAGG CAGGAAGCAG TGCCCTGGAA AAAACCCAAA      240
GGCATCAATT CCAACAGCAC AGCTAACTTG GAGGATCCTG AGGTGGGTGA TGCTGAAAGC      300
ATGGCGATCT CAGAGCCGAT CAAGGGCAGC AGAAAGCCCT GTGTGAATAA GGAGGAGTTG      360
GCTTTGAAGA AGCCCATGGC GAAATGTGCC TGGAAGGGTC CCAGAGAGCC ACCTCAGGAT      420
GCCCCGGCAG AAGCCGAGAG CCCAGGAGGC GCCTCTGAGT CAGACCAAGA TGGTGGCCAT      480
GAAAGCCAC CAAAGAAGAA GGCCGAGCTC GAG      513

```

## (2) INFORMATION FOR SEQ ID NO:640:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:



```

GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAATCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTT    240
TGTGAATTCG GATTCTTTAT ATTCAGGAGT TTTACTTAAA CTTTGAATCT GAAAGAACT      300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC      420
ATAAAGTGTT TCAATAGTTT TTGTAACCTA CACACAAATA CTGGATTAA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

```

## (2) INFORMATION FOR SEQ ID NO:641:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TTCATGGCCT AGTGTCCCA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGGAAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

```

## (2) INFORMATION FOR SEQ ID NO:642:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCCT TGATGCTGCG CAGCTCCGGG GCAACCCAC      300
TCGAG      305

```

## (2) INFORMATION FOR SEQ ID NO:643:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```

GCGATTGAAT TCTAGACCTG CACCCAGCCA AACTGAGAG ATTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATTG CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCAATTAT      180
CCATCCAACCT ATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTCCT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TTAGTCTCGA      300
G                                                                    301

```

## (2) INFORMATION FOR SEQ ID NO:644:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTT ATGAACATGA CCTGTTTTCG TGCACTAGAC ACACAGAGTG      120
GAACAGCCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAAGGAG GGTTCCAAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTT      240
CTGCATCCCT TGGCTGTGAT GCCCCTCTCC CGATTTCCTA GGGGCTCTGG GAGGGACCTT      300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG                    408

```

## (2) INFORMATION FOR SEQ ID NO:645:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTGGGT TTATTATCCC TGATGCATGT      120
GGCCCCCAC TGCTGTGTCC TTCTCCTGTT GGCTAGGGTT AGACCACACA GGCTAAACTA      180
ATCCGATTG GCTAATTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAGG TTGCTTTGCT      360
CGAG                                                                    364

```

## (2) INFORMATION FOR SEQ ID NO:646:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

GAATTCGGCC	TTCATGGCCT	AGGAGTGCAT	TTGGATCTAG	TGTTTTCTAT	CAATCTGTCT	60
GCTGATGTGG	CACTACTGCA	CCATTTACCA	CAACATTAGA	ATATGTCTGA	GTAACGGTT	120
GGCTTAGATT	TTTTCATTG	AGTCCACCC	CATTTCCAG	AACTTTCATG	GCTATTCTTA	180
TATGTTTGT	TTCCGTAAGA	TCTTTAGGAT	CAATTTGTCT	AGTTCTAAAG	AGGAAATTCT	240
GATATTATTG	ATTAGTAAC	TTCCATGAA	AAAAACCTAC	CATCACAGGA	AAGATGCACA	300
TTAATTACAG	GTAGCTCGAG					320

## (2) INFORMATION FOR SEQ ID NO:647:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

GAATTCGGCC	TTCATGGCCT	AGTCAGTGGC	TAGATTGATT	GATCCTCCAG	AATTAGACAC	60
TCACATGTTA	ACACCACTCT	CAGTTGGAGG	GCTGATAGTA	AACCTTATTG	GTATCTGTGC	120
CTTTAGCCAT	GCCCATAGCC	ATGCCCATGG	AGCTTCTCAA	GGAAGCTGTC	ACTCATCTGA	180
TCACAGCCAT	TCACACCATA	TGCATGGACA	CAGTGACCAT	GGGCATGGTC	ACAGCCACGG	240
ATCTGCGGGT	GGAGGCGAGG	TCTCGAG				267

## (2) INFORMATION FOR SEQ ID NO:648:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

GAATTCGGCT	TCATGGCTAC	TTTTGGTAAA	GCATACCCAA	CCTTCAGTTA	GAATATCTCC	60
TGATAATAAG	AAAGATCTCA	TTGAAATTTA	TTAATTCTTT	TGTGTCTAGT	AGATAACTTG	120
GATGGCACAC	AGTGCTTTGA	TTTTTACCTG	CCCAGAAATT	AACTCCTCAT	CCTATCCTAC	180
ATGATTTTCT	TTTTCTCTC	CCCCTTCCTC	TTTTATTCCA	TGTCACTGGG	AATGGCAGGT	240
CTTGACCCAA	GTAATGGCAG	GTCTTGACCC	AAGCAAGCCA	GAAACCTGAG	CTTTAGTCTT	300
TATTCCTCCC	CACTTCTCGA	G				321

## (2) INFORMATION FOR SEQ ID NO:649:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC	TTCATGGCCT	AGAGGAAGTG	AACGGATGGG	GCCTCATCCT	CCTGCCTCCC	60
TAAAGGGTGA	GGGTGGAAGG	ATGGGGCTGT	GCCCTCTTAG	GGCAGGGAAA	AACAGCTTGG	120
AGGGSTTTCT	GCCATCAGAG	ATCCCATAGG	AGGCAGGTCA	GTCTGCAGA	ATTTCTCCCC	180

```

AGTCTGGCCT CCAGCCTCCC TGGCCCTTT CTAGAGGCCT CCATCCCCT GCGGCTTGC      240
TCCTGCCACC GGGCCTCTGC ACAGTCACCT CCTGCAGCCT GGGGTGTGTC GCCTCTCCAC      300
GTCTTGATAT TTTTGCTGGA ATGCAGACGA TACTATATTT ACCGTATAAT ATATTATCAG      360
CTCTCCTATA TCTCAGTCAA TTTACATAGT TTAAAATAGA ACATCTTATT AAAAACATCT      420
AGATATACAC AGATTAGGAA ACGCTTACAA CATACAAATA CACAACTAG AAATAAATCT      480
TTAGCATACT GGTATATACA ACAGTGTGAT ACAATAAATA ATTCATTCA TGCTCTATCT      540
ACACATCATA TTGCTCGAG                                         559

```

## (2) INFORMATION FOR SEQ ID NO:650:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GAATTCGGCC TTCATGGCCT AGGGAGACTG AGGCAGGCAG ATCACCTGGG GTCGGGAGTT      60
CGAGACCAGC CTGACCAGCA GGGAGAAACC CCGTCTCTAC TAAGAATAGA AAATTAGGTG      120
TGGCGGTGCA TGCCTGTGGT CCCAGCTACT CGGGAGGCTG AGGTAGGAGA ATCGCTTGAA      180
CCCGGGAGGC GGAGGTCATG GTGGGCCGGG ATTGCACCAT TGCACTCCAG CCTGGGCAAC      240
AAGAGTGAAG CTCCATCTCA AAAAAATAAA AGCCTAGCCT CCCAAAGTGC CAGGATTACA      300
GGCATGAGCC ACCGCGCCTG TCTGTCCGCC CGTCTTCTTT TTTAAGAGCA AGAAAAGGTT      360
TCCCAGAAGT ACTCTGGTAG ATTCTTATCA CACACACATT CCTAAACCAG TTACTGGCAA      420
AGAAAATAGA ATTATCATGA TTAATTAGCA TATTCTGAAG NACATGCTTC CCTCGAG       477

```

## (2) INFORMATION FOR SEQ ID NO:651:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GTGTGAACCT ACGGGAAGGC GGCCGCCTGC ACCTCTGTGC GGAGACCAAG GATGATGCC      60
TAGCATGGAA GACAGCACTG CTGGAGGCAA ACTCCACCCC GGTGCGCGTC TACAGCCCGT      120
ACCAAGACTA CTACGAGGTG GTGCCCCCA ATGCACACGA GGCCACGTAT GTCCGCAGCT      180
ACTACGGACC GCCCTACGCA GGCCCTGGCG TGACGCACGT GATAGTGGCG GAGGATCCCT      240
GCTACAGCGC CGGCGCCCTT CTGGCCATGG GCATGCTTGC GGGAGCCGCC ACTGGGGCGG      300
CGCTGGGCTC GCTCATGTGG TCGCCCTGCT GGTTCGAGC CCTGGGACTC GGAGCACTGA      360
CCCCTGCGCT TGGATTGCTA GACTCCTCTT CCTCCTGGAC CCCATCCTCT CGAG         414

```

## (2) INFORMATION FOR SEQ ID NO:652:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTCC ATGACTGGAG GGGCGCCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTTCG      120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA      180
TGGCAACCCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC      240
AGACTCTCTC CAAATGCTCA TCAAAGACC ATCCAGTGGA ATAAGTGAGG CTTTGATATC      300
TGAAAATGAA AACTCTAACC TCGAG                                           325

```

## (2) INFORMATION FOR SEQ ID NO:653:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTCGGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC      120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC      180
CTGCAGCACA CAGGGAAAGT GAGCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG      240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAAGGACTG GAGAGAAAAT      300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTGCG      360
TTTGAAGGCC TGGAAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                           443

```

## (2) INFORMATION FOR SEQ ID NO:654:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC      120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCAGCCA CAAAGGGCAG GTCATCAAGG      180
CCTGTAAGAC GGAGGCCGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT      240
CAGCCCCGAG CCCGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                           311

```

## (2) INFORMATION FOR SEQ ID NO:655:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CTTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCCCTG TGGAAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTAAG AGAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                      346

```

## (2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA      116

```

## (2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTTGAA GGAATTCTC TGGGGCTTTG      120
GGGAATTTAG TGCGTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTTAGTG      180
TTGGTTAAGT TGTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTTAA CTGAAAACAG GTGACACAGA GTCACCAAGT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTTACCAG GCCGAGTGGG ATGACTATGT GCCCAAAGT TACGAGCTCG      480
AG                                                                482

```

## (2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTTCGT GCCTCTTGTC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

```

ATGGCTCCGA TTCGACTCTC AGACCAAGAG CATCTTCGAG CAAGAGAATA ACCATTCCAG      240
TTTCTACACA GGAGTGATCA TTCTGATTGG AGCCGGGGCC CTCATGATGC TGGTTGGTTT      300
CCTGGGCTGC TGTGGAGCTG TACAAGAGTC CCAGTGCATG CTGGGATTGT TCTTCGGGTT      360
CCTCTTGGTG ATATTGCCA TTGAGATAGC CGCCGCCGTC TGGGGCTATA CCCACAAGAG      420
TCGAGTCGAG                                     430

```

## (2) INFORMATION FOR SEQ ID NO:659:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

```

GAATTCGGCC TTCATGGCCT AAGAGTACAG AGATTTCAC TATCTTGTG CTAATGTTTA      60
ATTNAAAGTA TATTGACACT AGTAAAGACA CTTTATTTTA ATTTGAGGTA TAAATGTCTA      120
CCTAAAATAG ACTATTTCCA TTGAGTCATA CATTTTAAAT GTGGTATATA TTCTTATATT      180
TCAGAAAATG ATAACATCA TAGAAATCTA ATACTCATT AATTGATTAA TAATTATTTT      240
TTTCCTCAA TTTGAAATA TCTTTTCCTA TGTAATGGTC ATGTCTCGAG      290

```

## (2) INFORMATION FOR SEQ ID NO:660:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

```

GAATTCGGCC TTCATGGCCT AGTCAGAAGT CTTTGTGTCC CTGTTTTTGT GTCCATTTC      60
TGTACCTTGG CACTTTAAGG CTGTCTCTGC AAAATAAAAC ATTGCATCAT CACTTGTGAA      120
GGCAGAGCTT GGGAGTTTGC ACTGCTAAGA TGAGGATAGG AAAGAAATTT ATGCCGCAGG      180
GCCTTTGATG CTGCCCCTC ACCTGTCTGC ACAGCCAGGG CACGGCCAGC GGGAGTGGAG      240
AAGACGAGCG AGACCAAAAC CTTGCCGTGG GGAGGAGGTT GGCATAGCCA TTGATAAATC      300
GGGACTTGAA CTATCCCATC ACTCTAAAAA TATTTTTTAT CTGATTACAA AAGTAATAGA      360
TGGCCAGGCA TGATGGCTCA TGCCTGTAAT CCCAACACTC CTCGAG      406

```

## (2) INFORMATION FOR SEQ ID NO:661:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT AGTGGAAGT AAAACTCAGA GGAGGCATCA AACCCAGGCT      60
TGGGGGACAA AACTAAGTCT TGCCAGAGTC CTGAAGGATG AACACAGTT AACCAAGCAA      120
GGGATACTGG AGGGCATGGA GGCTCTCTGG CCTGGAGTGC AGAGCATGGA GTGCTCAAAG      180

```

```

AGCTAGTTAG CTCTGCAAAG CTGAGTGTCA GGAATGTAAA GGGAGAGAAT AGGAGTGAGA      240
GAAGAGTCTG GCAAGGCAGA CAGGGAAGGC CTATATGCCT TGATGGAGAA CCACTGAAGG      300
ATTTAAAGAA GGAGAGGGTT AATTTGTCC AATAGAAAGA TCACATTGTG TGTAGTGTGG      360
AGGATGGGTT GCAGAGAGAG AAGCTAGAGA CAAAAGATG AGACGGGAAC AGCTGCAAAT      420
TTCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G                                461

```

## (2) INFORMATION FOR SEQ ID NO:662:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCGGCC TTCATGGCCT AGCCTGAGCT CAGGAGTTCA AGACCAGCCT GGGCAACACA      60
GTGAAACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCCTGGAGG CATGCACCTG      120
TGGTCCCAGT GCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCG GGAGGCAGAG      180
GTTGCAGTGA GCCAAGATCG CGCCACTGCA CTCAGCCTG GGCAACAGAG CGAGACTCCA      240
TCTCAACAA ACAACAAAC AAACAAACAA CAAAACAAAC AGTTATTTT TTCTACCAT      300
TCTAAGAAT GTTACATTG ATTCTTTTC AAAATTGGT CAGTTTGTAT AGTCTTATT      360
CTCCATACTT TCATTCCCC TTTTATTTC TGTAAATAAT TGAAC TTAT ATCCTTATA      420
TGATAATTTT AATATCCAAA GTCATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT      480
TTGTGGTGCT GATTTTCTCG AG                                502

```

## (2) INFORMATION FOR SEQ ID NO:663:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGGCCT ACAACCACCA ACATTGTGT TTTGCAGAT GAACAGGTG      60
ACAGAACTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC      120
TTCTGGAAT GAACCAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTCACAG      180
GGAAAGCTGT GAGGGTAAGT GGCACCCTTA GCTTCTTATT TATAAATGTG TCACTCATGA      240
GACTGGAGAG GCCTGAGTTG GGTGTTGAT AAATTTCTC ACTCAGCTCT CAGAAGAGAA      300
TTTAAAGCA GGCCTGTAAA AACTTCTTT CAACTAGGAC ATTGTTATC CAGTGTGGTC      360
TTGGGGCCCC AGCGGGCCCC TAAGGTCCTT TCCATGGGTT CAGAGGGTCA AACTGTGTT      420
CATAATAATG ACATTATTG CTTTCACTC TCATTCTCTC AAGAGTGAC AGTGGGTAC      480
TCGAG                                485

```

## (2) INFORMATION FOR SEQ ID NO:664:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAATA	TATCTTTGTA	TCTCTAGTTT	60
TTCTCCTTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGGTG	ATAACCCACT	120
TGGGTCGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTTGG	TGTTCACTTT	TTGGGTTCTC	180
ACTACCTTTA	TGAGCTATAA	CACTCACCTT	GAAGGTCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTACG	AACCCACAGG	CAGGAAGAAA	CTCTGAACAC	ATCCGAACAT	TGGAAAGAAC	300
AAACTCCAAA	CAAGCCGCTT	TTAAGAACTG	TAACACTCAC	AACTCGAG		348

## (2) INFORMATION FOR SEQ ID NO:665:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTAGAA	GTTGTTCTTA	60
ATCAGAGTGA	AGCTTGTGCT	TCGGAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TCCTCATGG	ATGAAGAAGG	ACCAGCCAC	ATTTACCCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCCTC	TTAAAAGACT	ATGAAGATAA	AATTCGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCAACTA	GCAGAACAAT	ATGAATCTTT	TGTGAAATTC	ACACATGATC	300
AGATTATGCG	ACGGTATGGG	ACAAGGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTCACAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTTGC	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTCCA	480
TTTTATACAA	CTTGAAAGAC	CGTAAACTT	TCTGGTTGCC	ACAAGCATAT	CTTTCTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

## (2) INFORMATION FOR SEQ ID NO:666:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATTA	TTATTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATTT	TCAGTTGAAA	TTGCATTAAA	TAAAAAGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATTTT	TGTAAAAAGC	TGCTTGTTTT	CCCCATTAC	AGGTTCTGTA	CAGAGTAATG	180
AGATGTGTGA	CGGCTGCAAA	CCAGGTGTTT	TTTTCTGAGG	CTGTGTTGAC	AGCTGCTAAT	240
GAGTGTGTTG	GTGTTTTGCT	CGGCAGCTTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCAAGTGGAG	AATTGCCAGA	CTTGTGGTAC	CAATTATATC	360
ATCTCAGTCT	TGAATTTACT	CACGCTGGTA	TGTGAATTAT	TCTTTTCCTT	TTTAATGTGT	420
TGGTTTATTC	AGGCCCATCT	CGAG				444

## (2) INFORMATION FOR SEQ ID NO:667:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAAGTAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAAC TTTGGTTATA TGGAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTTAAA CAAGAGGAAA ACGGAAGTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCTCG CTGCCTGAAG ATGCATTGTA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                          524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACCTTG AATAAACTT TCCACATTG GAAATCACC ATGCCTGGCC CTTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTTAG AAATTGTTAC CCTCATACTA ATATTTACTA      180
CAACCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTTCCCATTA ACCTTTCTAA      240
ATTTGAGTCT TATTAAACCA GACTCATAGC CCTTGTGAC TTTTCTTCCT GATCTGTGCC      300
TTATCCCTAG GCGCGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTGA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAAATTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTC AGAAAGTAAG AATATATAAA TTACATTTAA      540
TCTTGAAGCT CGAG                          554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAA GACCTATGGT TGTGTTTAA ACGTGTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGA AGGCCTGGAA ATATGCATTT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAAATTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGAATTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                          329

```

(2) INFORMATION FOR SEQ ID NO:670:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```

GGCGTATGAT ACCTAAAGTG GAGTGGTCGG CGTTCCTGGA GCGGCGCGAT AACTTGCCTC      60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA      120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT      180
CTGGACGTAT GTTCCCATC AGCCGCGGGA TCCCAACAT GCTGCTGAGT GAAGAGGAAA      240
CTGAGAGTTG ATTGCACCAG ACTCGAG                                         267

```

## (2) INFORMATION FOR SEQ ID NO:671:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```

GAATTCGGCC TTCATGGCCT ATTATCTCTC AAAACAAAG CAATAAGTAC CAAGAAATAG      60
CAACAAAAAT TAGCTTGTA GGTGGTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT      120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCTGCCA CTTATTCATT      180
TTATTTTATT TTATATTTTA CTTTAAATTT TTTGAGATAG GGTTCACCC TGTCGCCCAG      240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT      300
CAGCCTTTTC AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAAAAAAA      360
TTTTTTTGTG GGAACATGGC AAGACCTTGT CTCTATTAAC AACACAGCA ACAGCAACAA      420
CAACTCGAG                                         429

```

## (2) INFORMATION FOR SEQ ID NO:672:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```

GTAAAAATCGT TCTTGAGAGG AACGTCTCTG TGCGAAGAGA TAATGAGTTT AGCTCTGAGA      60
AGTGAGCTTG TAGTGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG      120
AAACAAGAAA TTAAAGATGC TTTTGAAC TAATGATACAG ACAAAGATGA AGCAATAGAT      180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA      240
CTGAAGATTG TTAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT      300
AATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG      357

```

## (2) INFORMATION FOR SEQ ID NO:673:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

```
GGTAGATACT GGTTTTTCGT ATCCTGCTTC TCTTAAGGGC AGCTCTTTT AGCATACTCC      60
CATGCAGCAA CAGAAATTG TATCTTTTTT TTCTTTTTTG AGATGGAGTC TCGCTCTATC      120
ACTAGGCTGG AGTGCACTGG CACAATCTCG GCTCACTGCA ACCTCTGCCT CTGGTTCAA      180
GCGATTCTCC TGCCCTAGCC TCCTGAGTAC CTGGGACTAC AGGTGCGCGC CACCACACC      240
AGCTAATTTT TATATTTTGA GTAGAGACGG GGTTTTACCA TGTGGCCTCG AG          292
```

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

```
GGATGGACAT CAGCACTTTA CGGCGCCAGC TGAGACCCAC AGGCCAGCTC CGTGGAGGGC      60
TCAAGGGCTC CAAGAGTGAG GATTGCGAGC TGCCCCCGCA GACGGCCTCC GAGGCTCCCA      120
GTGAGGGGTC TAGGAGAAGC TCATCCGACC TCATCACCCT CCCAGCCACC ACTCCCCCAT      180
GTCCCACCAA GAAGGAATGG GAAGGGCCAG CCACCTCGTA CATGACATGC AGCGCCTACC      240
AGAAGGTCCA GGACTCGGAG ATCAGCTTCC CCGCGGGCGT GGAGGTGCAG GTGCTGGAGA      300
AGCAGGAGAG CGGGTGGTGG TATGTAGGT TTGGGGAGCT GGAGGGCTGG GCCCCCTCCC      360
ACTATTGGT GCTGGATGAG AACGAGCAAC CTGACCCCTC TGGCAAAGAG CTGGACACAG      420
TGCCCCCAA GGGCAGGCAG AACGAAGGCA AGTCAGACAT CCAACTCGAG          470
```

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 637 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

```
GAATTCGGCC AAAGAGGCCT AGTCGCTCTT GCTGAAACCT TCAATGCAGT GAGCGCCCAT      60
CTCATTGGGA CCTACAGGCT GAAGTTCTTC CTCTGATGGA CATGACCCCC GTGTTGTCTC      120
TAATAACCTC ACTTTCACCTC TGTTCCAGCC ACACGGGGTT TCTGTCTTTC TCGGGTCATG      180
TCGGGCTTAT GTGCCTCGGG CCCTTTGCTC ATGCTGTTCT CTGCCTGGGA TGCGCTTTAC      240
TGGGTGCGAG GATGGTCAGT GATTCCATT CTCTCAGAGT CTATTCACAG GTCCCCTTCT      300
CGGTACAGCC TTCTCTGGCT CCACTGTCTA AAATTTCAAC AGCTGCCTCT GCCCCCGAA      360
CTTCATATCC CCCTTATCTG CCTTTTTTCC TTCAGCTCTT ACTTCCATCA AATACAGTAT      420
GTATTTTAA AAGTCTTATC TTGTTACCGG TCATTTTCTT CCACAGGTAA TTTTGGTAAA      480
CTTTGTAAGA TTGATGATGT TTAATACTGT TTTGTTTAAT ACAGTACCCC CAGTTTAGCA      540
CACAGCTTTT GAATGAATGA CCAGTTTFTA TTCCCCTCTG AAGCGCTAAG AGCTGCCGCT      600
GAGGTGGCAT CTGTAGCNGC TCCCGCTCCA ACTCGAG          637
```

## (2) INFORMATION FOR SEQ ID NO:676:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 513 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

```

GAACACGTCA TGAGGAAGGA GCAGCGCAAG GAGGAGAAGG AGAAGCGGCG CCTCGACCAG      60
CTGGAACGTA AGAAGGAGAC GCAGCGCCTA CTGGAGGAGG AGGACTCCAA GCTCAAGGGC      120
GGCAAGGCGC CGCGGGTGGC CACGTCCAGC AAGGTCACCC GGGCCCAGAT CGAGGACACG      180
CTGCGCCGAG ACCATCAGCT CAGGGAGGCC CCGGACACAG CCGAGAAAGC CAAGAGCCAT      240
CTGGAGGTGC CGCTGGAGGA GAACGTGAAC CGCCGCGTGC TGGAGGAGGG CAGCGTGGAG      300
GCGCGCACCA TCGAGGACGC CATTGCAGTG CTCAGCGTGG CGGAGGAGGC GGCCGACCGG      360
CACCCAGAAA GAGCATGCG GGCAGCCTTC ACAGCCTTTG AGGAAGCCCA GCTGCCGCGG      420
CTCAAAACAG AGAACCCCAA CATGCGGCTG TCGCAGCTGA AACAGCTGCT CAAGAAGGAG      480
TGGCTCCGCT CTCCTGACAA CCCCAAACTC GAG                                     513

```

## (2) INFORMATION FOR SEQ ID NO:677:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 376 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GTCCATCCTG AGCTCCATGG AGAAGCCACC CAGCCTCGGT GACCAGGAGA CTCGGCGCAA      60
GGCCCGAGAA CAGGCCGCC GCCTGAAGAA ACTACAAGAG CAAGAGAAAC AACAGAAAGT      120
GGAGTTTCGT AAAAGGATGG AGAAGGAGGT GTCAGATTTC ATTCAAGACA GTGGGCAGAT      180
CAAGAAAAAG TTTCAGCCAA TGAACAAGAT CGAGAGGAGC ATACTACATG ATGTGGTGGA      240
AGTGGCTGGC CTGACATCCT TCTCCTTTGG GGAAGATGAT GACTGTGCTG ATGTCATGAT      300
CTTCAAAAAG GAGTTTGCAC CCTCAGATGA AGAGCTAGAC TCTTACCCTC GTGGAGAGGA      360
ATGGGCCCCC CTCGAG                                     376

```

## (2) INFORMATION FOR SEQ ID NO:678:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 350 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GAATTCGGCC TTCATGCCTA GCAGGAGGTT TTATTGTAAA GAGGCCGATT GTACAGAGCA      60
AAGATTGTTT TGACACGGGG GGCTGGGTGG TGGGACCCAG AGGCCAGAGC TGGGTGAAGG      120
ATGAGGGGTG GCATCGCCCC ATCCAGGCAG TGGGCAGGGC AGGGAGGACT AAACGGCTGC      180
CTCCAGTTC CCTTCCCTGC CCCTCATTAC TGGGTAAGAG GGAGCCAGGC TATTTCACG      240
GATCCAGGAG AATATAGCAG GAGACCCTCA CCACCCACA CCATGCCCCA AGGATACGGG      300

```

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 357 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTCATGGCCT	AGTTCTCACC	GGGGAAAAAC	CCACTGTTAG	GATGGCATGA	60
ACATTTCTT	AGATCGTGGT	CAGCTCCGAG	GAATGTGGCG	TCCAGGCTCT	TTGAGAGCCA	120
TGGGCTGCAC	CCGGCCGTAG	GCTAGTGTA	CTCGCATCCC	ATTGCAGTGC	CGTTTCTTGA	180
CTGTGTTGCT	GTCTCTTA	TTAACCGTGC	TGAGGCTCCA	CATAGCTCCT	GGACCTGTGT	240
CTAGTACATA	CTGAAGCGAT	GGTCAGAGTG	TGTAGAGTGA	AGTTGCTGTG	CCCACATTGT	300
TTGAACTCGC	GTACCCCGTA	GATACATTGT	GCAACGTTCT	TCTGTTATTG	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTTAAAA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 406 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC	AAAAATTGAG	GCAGAAGATC	AAAATCGGAG	TGGTAGGCGG	ATCGGACTTT	60
GAGAAAGTGC	AGGAGCAACT	GGGAAATGAT	GAATATTCAA	AGTCATCTGG	GTGAGGCCCT	120
AATCCAAGAT	TTAATCAACT	ACTGTCTGAG	CTACATTGCG	AAAATTAAAC	TCCCGAAGAA	180
GAGGGGTACT	TTCATTGAAT	TCCGAAATGG	GATGTTAAAC	GTGTCCCCTA	TTGGAAGAAG	240
CTGCAGCCAA	GAAGAACGCA	TTGAGTTCTA	CGAACTCGAT	AAAAAAGAAA	ATATAAGACA	300
AAAGTTTGTA	GCAGATCTAC	GGAAAGAGTT	TGCTGGAAAA	GGCCTCACGT	TTTCCATAGG	360
AGGCCAGATC	AGCTTTGATG	TCTTTCCTGA	TGGATGGAAA	CTCGAG		406

## (2) INFORMATION FOR SEQ ID NO:682:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT ACCCTTCTAG GTGTCATCTC CTCCTCTCCC TTTCCCCCAA      60
GACTCCCTCT GGGCCAGCC AGCAGGTGAA GCCTGACTTA GGAAGGGGG GATTTCAGG      120
GGAGGGGCCC TGGCCCCAC TGACCCAGCA TTGCTATCCA CAGGAGGAGC AGCCCCACA      180
ACATCGATCC AAGAGGGGGG GCTCAGTGGG CGGCGTGTGC TACCTGTCGA TGGGCATGGT      240
CGTGCTGCTC ATGGGCCTCG TGTTCGCCTC TGTCTACATC TACAGATACT TCTTCCTTGC      300
GCAGCTGTCC CTCGAG                                     316

```

## (2) INFORMATION FOR SEQ ID NO:683:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGT GTGAGCTAGC ACTCCAGCC GACAGGTGCT TCTTAAATGT TTTCTTTGAG      120
CAGGAATTGG TCCAGGAATT GGTTCCTAAG TTAGAAGGAA AATTGTAGGG GAAGAACTTG      180
TTTTTCTCC AATCAGTCTC TGATTAAATA GTTATTAGGA AAAACTCCTT GCTTATGTCT      240
TTGTATGCA CATTTTATA TATGTATATA TGTGTAAATA GAGATATTTA TATATTACA      300
GACAAACACG TGTATGCACA TTTCACAATG GAGGAAGAAG GGATATGGTG TGCACTGAGG      360
TAAAGTGAGC AGGGATACAG AAGAGAACT CGAG                                     394

```

## (2) INFORMATION FOR SEQ ID NO:684:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GTCCTAACCT TGGGTCCAAG TTTCGTTATA GTGGCAGGAC ACAAGCGCAA ACGAGAAGAG      60
CCAGTGCGTT GATAGATCGC CCAGCACCTT ACTTTGAACG CTCATCCAGC AAACGTTATA      120
CCATGTCTCG CAGCTTGGAT GGAGCATCAG TGAATGAAAA CCATGAAATA TACATGAAGG      180
ATTCTATGTC TGCTGCAGAG GTTGGTACTG GCCAGTACGC CACAACAAAA GGCACTCTC      240
AGACCAACTT GATCACTACT GTGACTCCGG AGAAGAAGGC TGAGGAGGAG CGGGACGAGG      300
AAGAGGACAA ACGGAGGAAG GGGGAAGAAG TCACGCCCAT CTCGGCCATC CGGCACGAGG      360
GAAAGACTGA CAGTGAGCGC ACGGACACCG CAGCCGACGG GGAGACCACC GCCACTGAGT      420
CGGACCAGGA GGAAGATGCA GAGCTCAAGG CACAGGAGCT AGAAAAAACT CAAGATGACC      480

```

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

## (2) INFORMATION FOR SEQ ID NO:685:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 441 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GGC GTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTT CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTTA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                         441

```

## (2) INFORMATION FOR SEQ ID NO:686:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 273 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACCTCTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                         273

```

## (2) INFORMATION FOR SEQ ID NO:687:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 124 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                         124

```

## (2) INFORMATION FOR SEQ ID NO:688:



## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTITAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AACTAAGTC CCAAGAGGCG      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAAGTGGC ACTTGAAATA TTCCCGGGAA AGAAACATTA TGAACCAAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTTGTACTT GTTTTGCTCC AATTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTTT CATGTTACAT CTTTITAGATT ATTTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCCTC      180
CCACCTCTGC CACCCTAGGC TCGAG

```

## (2) INFORMATION FOR SEQ ID NO:690:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCTATC AACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:691:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```
GAATTCGGCC AAAGAGGCCT ACATCATACA AGTCGTCGTA AAGCAAATCT GAGCTGTTGT    60
CATTGGAAGG CACTTTAGTT TTGATGCAGT ATTCCGCCAG GGTGTGGGG ACCTTCACTC    120
CATCCTTTTC TGCTTCGGCC TTAGTGGCTG AAACCTGTTT CCTAATAATT TCAGCATATT    180
CTTTGTCTTT TCCTTTACTG TCTCTCCATT TCCTGAACAT AACTGAAGCA TCGACATTGG    240
CTGGGGAGAA GGTGTGGGC TCATTAAGCA GTGAGATTAC ACTTAATAGG ATAGTCCTCG    300
AG                                                                    302
```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```
GAATTCGGCC AAAGAGGCCT ACCAAATACC AGGCTACCAT GGTCTACAAG ACTCTCTTCG    60
CTCTTTGCAT CTTAACTGCA GGATGGAGGG TACAGAGTCT GCCTACATCA GCTCCTTTGT    120
CTGTTTCTCT TCCGACAAAC ATTGTACCAC CGACCACCAT CTGGACTAGC TCTCCACAAA    180
ACACTGATGC AGACACTGCC TCCCATCCA ACGGCACTCA CAACAACTCG GTGCTCCCAG    240
TTACAGCATC AGCCCCAACA TCTCTGCTTC CTAAGAACAT TTCCATAGAG TCCAGAGAAG    300
AGGAGATCAC CAGCCCAGGT TCGAATTGGG AAGGCACAAA CACAGACCCC TCACCTTCTG    360
GGTTCTCGTC AACCAAGCGGT GGAGTCCACT TAACAACCAC GTTGGAGGAA CACAGCTCGG    420
GCACTCCTGA AGCAGGCGTG GCAGCTACAC TGTCGCAGTC CGCTGCTGAG CCTCCACAC    480
TCATCTCCCC TCAAGCTCCA GCCTCATCAC CCTCATCCCT ATCAACCTCA CCACCTGAGG    540
TCTTTTCTGC CTCCGTTACT ACCAACCATA GCTCCACTGT GACCAGCACC CAACCCACTG    600
GAGCTCCAAC TGCACCAGAG TCCCCGACAG AGGAGTCCAG CTCTGACCAC ACGACCTCG    660
AG                                                                    662
```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC AAAGAGGCCT AAGCCCCAA AACACGCTCT TTTGTGCCTC CCCTCAAATC    60
CTTCACAGTG TTCTTCATA TCCACTCCTT CCAGGAAGCA TGTCTCACT ACCCCAGTTC    120
ATGTGGGTTT CTTCCCTCTC AGAATTCTA TCATGCCCCT ATAAGTTTAG CAAATTGTCC    180
TTCTTAATT GTTTCACATC TGTCCATCCG ATATCCCAGG AGGACTGTCA GCTCTATGAA    240
GGCAGGGGTT GTCTTTCCTT TACCATGCCT ACCATGCCTT ATAGTGTTAA TAAATTAACC    300
TACCCAGAAA TGTTCCTCGA G                                                                    321
```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCTACTT GCTTTTCTT AGCATATAAA      60
AGTCCACAAG TTTTACTCAT CTTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA      120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA      180
TACAATACTT GCTGTCCTGC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG      240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT      300
TTATACAATA CTTGCTGTCC TGCCTTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG       357

```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 225 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```

GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTTGAT      60
GTGCAGAGGC TGTTTACTTT GATGCAGTCT CACTTGTTTA TATTTTATTT TGTTGCTGGC      120
CTAGGCCTCT TTGGCCGAAT TCGGCCAAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT      180
GCAGTCCAG CCACCGGGA GACCGAAGCG GGAGGATCAC TCGAG       225

```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 314 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```

GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGGCGCT      60
GGCGGCCGCA GCCCTCGTAC TGATTTCAT CGTTGCATT ACAACTGCTA CAAAATGCC       120
AGCACTCCAT CGACATGAAG AAGAGAAAT CTTCTTAAAT GCCAAAGGCC AGAAAGAAAC      180
TTTACCCAGC ATGGGACTCA CCTACCAAC AACTTCTGT CGTTGTGCCT TCAAACAATG      240
AAGAAAAACG GTTGCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA      300
AACGAGACCT CGAG       314

```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 353 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCGGCC	TTCATGGCCT	ACAGAGTGTG	GACGGCCAC	TGGTTGGTG	GTGGTGGTG	60
CCCGTCACAG	GGCTGGAGGT	GTGGCCGGCC	CACTGGGTTG	TGCTTTCTGC	CGTACGTCCC	120
TTCCCATGAG	GATGAGATGA	CCCATCTGTT	GCATCCCGGC	TGCTGATAAA	ACAAGACCCT	180
CGGAGCCAAG	AAACAACACT	GAGTTCCAGA	TTTCGGAAGG	TTCACGAGTG	TTGCCGACAC	240
GCCCTCCCAA	CTGCAGACAT	CCTCCCTGGA	GGACCTGCTG	TGCTCACATG	CCCCCTGTC	300
CAGCGAGGAC	GACACCTCCC	CGGGCTGTGC	AGCCCCCTCC	CAGGCCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	TTCATGGCCT	AGATTGACAG	AGGTCAGTTG	TCACTTCTTG	CCTCTCTCCC	60
CTTCCAGCAA	CATGTATAAT	CCTGTGAGTG	TTTCTTCAGC	ACCCTTCTCT	GTGTTTACA	120
CTACTGCAAG	AGCCTCCCTA	AGTGGTCTGC	CTGTTCCAC	CCTGTGTCT	TGGAATTTAG	180
TTTTCTCGCA	AAAGCCAGAG	AATGTTTCA	GAAGGTAGCT	CTTGAGCAAC	TTCCCACTTT	240
CTTGAGGGG	AGATCCAGCT	TCCCAACAA	GACCAGCAGG	CCCCTGTGCG	GCCTGGCTCC	300
TGTTACCCCT	ACCAGTCTTG	GCTCAGGCTC	ACGGCTGGAA	TATGCCGAGC	TCTTTCTTGT	360
CCTGGGGCCT	TTGCACTTGG	CTTCCCTCTG	TCCAAAATCA	TCTTCCTGTA	GCTTTGTGCT	420
TGCCTAGCTC	ATCATCATAG	CAGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GAATTCGGCC	TTCATGGCCT	ACAGAGAACT	GAGGAAAACC	AACTACGTGG	AGAATCTCAA	60
AGAAAAAGC	GAGGGAGAAG	CTTCACTGTA	TGAAGATAGA	ATAATAACAA	GAGAGAAGGA	120
CATGAGGAGA	GTGAGAGATG	AGCCCGAGAA	GGTGGTGAAG	CAGTGGGACC	ATAGTGAGGA	180
TGAGAAAGAG	ACAGATGAGG	ACGATGAGGC	TTTTGGGGAA	GCTCTGCAGA	GCCCAGCAAG	240
CGGAAAGCAG	AGTGTGGAAG	CAGGAAAAGC	CAGAAGCGAT	TTGGGAGCAG	TTGCCAAGGG	300
CCTGTCAGGA	GAATTAGGCA	CAAGATCAAG	AGGGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

```
GAATTCGGCC TTCATGGCCT AAGCCAAGCA AGGCTGTACC TTAAATTACT GCTGCCCTCA    60
TTTGCACTCG GCTGCCCTCA TTATAGTGCT ATTAGCAGAG TGCAGGGGTC CTCCTGCTGG    120
CCCATCGGGA GTGGTGCGTG CACAGTTGTG GGGCCTTGCT TTGGTGCTCT TGCTGCCTT    180
CTGGGCAAAA TGAAGGATTT GGAGTAGACA GCAAGCAGGC ATACATCCTG GGCCAGAAGC    240
AGCCTGCGGA GCTCATCGTG GCTTGCTTA AATTGTTTCT CAACAATAAA GTTGTTGAAA    300
AACAATTGTG GTTTCTTTC TCCTATTAA AAACCCAAA TTATATTCAT TATAGAAAAT    360
TAAAGAAGAT AGCTCTCGAG                                         380
```

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

```
GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAGCCTCCC AAAGTGCTGG    60
GATTATAGGC GTGAGCCACC GCGCCAGCC GAAAATCTAA AGATATTGAA AAGATACAAA    120
GGAGCACATT ATGAACATTT TTTTCGTATC ACTGAGTATT TTATACTGC ATCATTGATT    180
TTAAAAGAAT TCATGACTTT GAAAATAAT ATTCTACAAA GTAGCTTTTG ATTAAACATG    240
AGATTTTATA TATGTGCTTA TCTTGTTCT CTATGAAACC CCATTGAAAT AAGAAAATGT    300
AAACACCAGC CAACTCGAG                                         319
```

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```
GAATTCGGCC AAAGAGGCCT AATAGTCAAG ACCTTTGCAG TTTTGATCAC AGAAATATGA    60
AAGATTACAC AGCTACAGCT ATATGAATGA TAAAAGTGAC AGCTATGGAT TTTTAAAGTT    120
ATAAGTTGCT ATACTACATA TATGTAATGT GTGTGTGTAT AGTGTGTAGG TATATATATT    180
TATATTTATA CACACACTAT ACATGTATTT TAAAATATTG AAAATCCAGA ATTATTTTAT    240
GGTAAAAATT ACTAAAATTG ACTTCACATG CTGAATGAAG AGAGCCTGAG TAGACCAACA    300
AACAAATGAA AATTAAAGAC GGTAGAAGA TACGCTTCT AAAAGAATAC ATTTAGAATC    360
TAACTTTAAA AAAAAAAAT CCTACTCTCC TGAGCCAGAG TGGTCTCAGA GAGACTCCGA    420
GAACCTAATT TTTTACAAGT AAAATCTTTG AAGAATTGGT AATTGCTAAA TTTTCCAAC    480
ATACTATTCT ACAAGACTAA CCTAAACTG ATTATAAGAA CTAGGTGAGG AGGGCCGGCA    540
AACTCGAG                                         549
```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```
GAATTCGGCC AAAGAGGCCT ATCGAGCCAC TGCACCTGGC CGATGTGTTC TGTGTGAAAT    60
CTTACTCAAA AGTATTGAA GAGTTGTGTA TAGTTGTATG GATATGTCTG TAGTAAACAG    120
AAACAAATTG CTTAGTTTC TCTTTACTTA TTTTCTAGGT TACAGTACCT TTACCAGCAT    180
CCCAGCTTTC CTTGCCTAAT TTTGGATCTA CAGGGCAACC TCTAATTGCT TTGCCTCAGA    240
CTCTTCAGCC CCCATTACAG CATAACCTC CCCAAGCACA GGCTCAGAGT CTGAGTCGTC    300
CTGCACAAGT AAGCCAGCCT TTCAGAGGAT TAATTCCTGC TGGAACACAG CATAGCATGA    360
TTGCAACCAC CGGAAAAGTA AGTAAAGAGA CATTGCACA GGTATTGGA GAATTTAAGG    420
TAGTGTGTTC AGATATATGC ATCTGTGTTA TCTAAAAAAC TAAATGCGT CAGTTTTTAC    480
CACCCTGCAA AAATCTCAAA CCCAGTATA TTTACATTTT ATCTATTTAC TTTAATGTG    540
TTGGGCCCCA TCTAGTTTTT ACCTAATAAC AAAGAATTCA CAAATTTATT GGAAGAATTG    600
GATTTATAGT GTCTCTTCGG CTTATTTAAT TATAAGTCTG TTTGGTCAGG TAATTCATA    660
ATACTGAAG CTAAGTATA GGAGTTTGT ACTAAGGTTT TTTGCCCTT CTTAGATTAC    720
GTCTTCACGT ATAGGACATG TAAACACAGC AACTCGAG    758
```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 663 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```
GAATTCGGCC AAAGAGGCCT AAGATGGCCT TCCCATGTGA TGGCTACATG GCTGTGATAA    60
CAAGTAGAGT TATGTGTCTG CGCTCTAAAC TCACTGAGTC TTGCAGGATG TAAACATCCT    120
AGCTCAGCCT ATCCTTGACC AAAGCACANT CATGCTCCTT ACAAACCTCCA ACCAGCCTGC    180
ACACTGGGAG GAGCGCGTGC TGGGCTAGAG CCACAGAATT TTGTACCGTT GGCAGCAGGG    240
AGGAGCCTGG CCCCTCCTTT CTTAGGTAGA ATCTGGAATT CAATCTGTGA GGTGGGAAGC    300
ATATACTAGG AGGACTTTCA CTCTGCTGAG TCCCTGTTCC CCCTCCCTTT TTTTCCTTT    360
TTGCCCAATA AACCCCTTTA TTCTCACACT TCAAATTGTC TGTGAGACTA ATCTTTTGTG    420
GCCATGTGAC ATGGACCTG TCTGTAGCTG AAACCTAAGAA AAAGCCCTC CCGCACAGTC    480
TGATGTTTCC TCAGTCAGAC ACTGCAAGCT GTGATGTTGG GGTGAGTACA GGATATTTGG    540
CAATATTTGC AGACAGTTT GGCTGTCAGA GAGGAAGATG CTGTATGCAG ACACACTTGA    600
CAGCAATAAC TTAAGCCAC CCTGAGACTG ACTCTGCATG GTGATGCACC TGAAGGCCTC    660
GAG    663
```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```
GAATTCGGCC TTCATGGCCT AGAGCGATGT CAAGTGATCT GCCCGCCTCA GCTCCCCAAA    60
```

GTGGTGGAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCCATT TTTTAATTTA	120
GTAATTCTAA CCTAGGTATT TTTCCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA	180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAAACACAA CCTAAAAACC CAATCTGAGC	240
AGGTTTAAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA ACAAAAATAT	300
GTCTGTAATAA TAATCATGTA GAAACTGGCT CGAG	334

## (2) INFORMATION FOR SEQ ID NO:706:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCCT CCTTCACTGT	60
GACGCTTGTC CTCACTTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTCC ATCAGCCCCCT	120
GTCTGTACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC	180
AGTTTGTCTC CTTCTGCCTT GAAATTTGTT CCTCCCAGAA ACTGTCCCTC ACAAGGCATG	240
AACAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGETGCAGAA TGAGCTGTGG	300
AGTGCCCCGT CCGGAGTCCT GAACAGCTTC AACTTTTCC CCTTTAGAAA TGCCTAACAC	360
GCCCTCGAG	369

## (2) INFORMATION FOR SEQ ID NO:707:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTTGGTGCA TTATATCAGG	60
AGGCAAATGA TGTGGGTTTG TCCCATTTGT TGTAAATGGTA ACATTGGTTG CTGGTTAAG	120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAA GTTCCTATTT TTTTCTCTGT AATTAATAAG	180
TAATTTGTAT GATACTTTGA GATAACAAAG TAGACTGTTC ATCAAACCTT CATCAATGAA	240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGAATGTCAT	300
TTACCATTTA ATACATTTCA AACAGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC	360
TCGAG	365

## (2) INFORMATION FOR SEQ ID NO:708:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA	60
---	----

```

GAGCAAAGAG CATGAGAAGC TGATGGAGGG AGAACTTGAA GCTTTGCGGC AGGAATTTAA 120
AAAGAAAGAC AAGACGTTGA AAGAGAATTC CAGAAAGTTG GAGGAAGAAA ATGAGAATCT 180
CCGAGCAGAG CTACAGTGTT GTTCTACACA ACTGGAATCC TCTCTCAACA AATACAACAC 240
CAGCCAGCAA GTCATCCAAG ACTTGAATAA AGAGATAGCC CTTCAGAAGG AGTCCTTAAT 300
GAGCCTGCAG GCCCAGCTGG ACAAAGCTCT GCAGAAGGAG AAGCACTATC TCCAGACTAC 360
CATCACCAA GAAGCCTATG ATGCATTATC CCGAAGTCA GCCGCCTGCC AGGATGACCT 420
GACACAAGCC CTCGAG 436

```

## (2) INFORMATION FOR SEQ ID NO:709:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GCTGCTCTAT ATCTTAGAGA AAATAAAGA ACCACATGTT GCTTCCCTGC CTGCAAGCTC 60
TCTGAATTC ATCACCATTG ATGTTCTTTC CTTCAGGGGA AATGAAGGCA GATTGTTCTG 120
TTGGTGCTCA CAGATCTCTT TCTGTTCTGA TACCCTCCTC TTCCTCTCCT GCTTCTTTCC 180
CTTCATCATG TGCTCCTATA CAAGTCTCTC CCAACTTTAA AACAAAAACA AACCTTCCC 240
TAAATCTGT GTTTGTTCCA GCCATTAGAC TGTATCGTCC TTGCCATCCA CGTTATTGGA 300
AGAAGGCCAG CTCACCTCTA CTCCTTTCT GCCCTTTCCC TCTTAATCTG CTGTCCTCTG 360
ATTTCTGCCC CCACAACTC GAG 383

```

## (2) INFORMATION FOR SEQ ID NO:710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGGGGCCTGA AGATCTTCGG GTATTGGCT CCCAGAATCT 60
GACCACAGTG AAGCTAAAAG GGGTGGGTGA CAGCTTCAAG AAGTATCCTG ACTACGAGTC 120
CAAGGGCATC AAGGCTCACT TCAACCTGGA TGAGAGTGGC GTGCTCAGTC TAGACAGGGT 180
GGAGTCTGTA TTTGAGACAC TGGTAGAGGA CAGCGCAGAA GAGGAATCTA CTCTACCAA 240
ACTTGGCAAC ACCATTTCCA GCCTGTTTGG AGGCGGTACC ACACCAGATG CCAAGGAGAA 300
TGGTACTGAT ACTGTCCAGG AGGAAGAGGA GAGCCCTGCA GAGGGGAGCA AGGACGAGCC 360
TGGGGAGCAG GTGGAGCTCA AGGAGGAAGC TGAGGCCCA GTGGAGGATG GCTCTCAGCC 420
CCACCCCTT GAACCTAAGG GAGATGCAAC CCCTGAGGGA GAAAAGGCCA CAGAAAAAGA 480
AAATGGGGAA CTCGAG 496

```

## (2) INFORMATION FOR SEQ ID NO:711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAAGTAA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTAA	ACTGCGTATT	TTATATCAGT	CGCTGGATTA	GGCCCCCTAGA	GACAGTGGTG	120
GCTAAGTGAT	AAAGTCTTTG	CGCTTGTGGC	ATTTTATAGT	GTAGTGGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAATCATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
GAAAAAAGTA	AGGTGAAGGT	AGAGGGGTTG	GAGCAGGAGG	AAGGTGTTAT	TTTAGGTAAA	300
GTGGCCAGGG	AAGGCCTTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAAA	GATGGTAGGA	420
ACAAACACGG	CTTGTTGAAA	GAACAGCAAT	GTTTGAGGAA	TGAGCCAGAC	TCGAG	475

## (2) INFORMATION FOR SEQ ID NO:712:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	AATTTTGCAT	AAAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCAAAACC	ATTTTCACCT	TGTTTTAGGT	ATTTATAATA	ACAGCACTCC	CACCTTCTCAT	120
GATCAATTTC	CATCTTCAGC	GGTTCAGGCT	GCTTAAATAA	AGTTCCATAA	CCTGAGTGCC	180
TTTTAAATAA	CGGAATGCAC	ATCTCACAGT	TCTGGAGGCT	GGAAGTCCAA	CAGCAGAGTG	240
CCAGCATAAT	TGGGTTCTGG	TGAGAGAGCT	CTCTTGGGTT	TCAGACTGCT	GCCTTCTCAA	300
TGCAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTAAAGG	GCACCAATCT	360
AATTTATGAA	GCCTCCACCA	TAATAAGCTA	ATTACTTCCC	AAAGTGCTGA	GATTACAGCT	420
GTCAGCCACC	GTACCTGCCT	GGGAATTTTT	TTAAAGCTCA	AATTGGATAA	GAGGGTTATA	480
GGAATATATT	CATCTATCAT	ATAGAAAAGA	ATATGTGCTC	AGTCCCAGGA	AATAGAAAAT	540
ATATTACCTT	ATTTATACTG	TTTTAATTAA	TGCTTTTAA	AATCTGATTA	ACTCTGGGAG	600
AGCTCGAG						608

## (2) INFORMATION FOR SEQ ID NO:713:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	AGGCTGAGGC	60
AGGAGAATCA	CTTGAACCCA	GGAGGTGGAG	GTTGCAGTGA	CCCAAGATCA	TGCCACTGCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTAAAAAAA	TTAAAAAAA	AAAAAAAAGA	180
TTGCACAAAT	CAGACAGTGA	CCCAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	TTGGGGAGGG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	ACTTGAAGGA	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	TTGAGCCAGA	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	AACACAGGTA	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	ACTTGATTCC	480
ATAGGTAAGT	AGGGGAACCT	GAGGATGTTT	AATCAGAAAT	GAGATCTCGA	G	531

## (2) INFORMATION FOR SEQ ID NO:714:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT AATTTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTGTGA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAÀ AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATAC TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCTGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:715:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCT TCATGGCCTA GAGATTAAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTTC TTTTGTGCTC AAGGAGACAG ATGGAGCGAG TGTTTTCTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTC GGTGTCTGCT GTTTTCACAT CTTCTCCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTGTACCA CAGTCACGTT TTAAGTCCTC      240
TGACTGAAAT GTGAAGGTCA TTTCCCGCTT AATGCTCCCC ACCTGTGAAA TGAAACACAG      300
AAATTCTTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTTTCTCT GAAAGATTGT ATAATTTTAA TAAGAAAAAT      420
GCAACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:716:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCACG CCAAGTTCCG      60
CTGCTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCGCCGCC TCATGTACCG CGACCGCGAC GGCGGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGCGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360

```

CTCCCGCATC CCCACGGCCT GGTTCCTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420  
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

## (2) INFORMATION FOR SEQ ID NO:717:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60  
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCTG CTCCTGTGGT CCTTCTCGTG 120  
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180  
CACCTTCCCC GCTGTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240  
GATCAGCCAA CTGCAGAACA TTTGTTGTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300  
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360  
CACGAGGCTC CCACAGACCG CCTTCCCCCA GTCGAG 397

## (2) INFORMATION FOR SEQ ID NO:718:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTTGTATGG 60  
CAAATTCCTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120  
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180  
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240  
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATGCCTGTA GTCGCAGCTA 300  
CTCAGCAGGC TGAGACAGGA AGATAACTTT AATCCAGGAG TTGGAGGCTG CAGTGAGCCA 360  
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420  
AAAAGTAGAG CCGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480  
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

## (2) INFORMATION FOR SEQ ID NO:719:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60  
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT GTTCTCTAGC 120

```

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTTCCTCT CTCAGTCTCT 180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACTGC ACACAAGTCC 240
CTGTCTCAGG CTCCATTTGG GGAACCAA CTAAGACACC ACCTCAAAAC ACAGAATTTT 300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT 360
ATATTAATCC TAGTTATTTA ACTCGAG 387

```

## (2) INFORMATION FOR SEQ ID NO:720:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

CCCGTGATA GTTTGCAAAT ATTTTCTCCT CTTCTGTAGG CTGTTTACTC TTGTTGATAG 60
TTTCTTTTGC CATGCACAAG CTTTTTGGTT TAATTAGATC CCATTTGTCA ATTTTTCCTT 120
TTGTTGCAAT TGTTTTGGC GTCTTCATCA CGATATCTTT GCCAGTTCCT ATGTTCAAAA 180
TGGTATTACC TAGGTGCCT TCCAGAGTTT TTATAGTTT GGGTTTTTAT TTAATCGAG 239

```

## (2) INFORMATION FOR SEQ ID NO:721:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC 60
TCCCAGGTAC ACTTCCTGAT CACCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA 120
ATAATTCCTT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCACTGCCA 180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTCACGC 240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGAGCTC 300
CCTAGGCCAT GAAGGCCGAA TTC 323

```

## (2) INFORMATION FOR SEQ ID NO:722:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCGGGTC 60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA 120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGGATC AGAAATATAT CTATATTCTC 180
GACTAAAGTC TCATCAGGAA ATATTTCTGT TCTTTTATTT TAAGCATCAA ATTGTTTATG 240
TTGATTTAAA AAGGAAAAAA TACAGACGAC TCGAG 275

```

## (2) INFORMATION FOR SEQ ID NO:723:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC GTTTCGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

## (2) INFORMATION FOR SEQ ID NO:724:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTTGTGGA GGTCCGCCAGG GTCATTGTCG TGGATTTGCA      120
CAGTCGGCTG GCGGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTGA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTGTT AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

## (2) INFORMATION FOR SEQ ID NO:725:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTGTGTCG TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGACTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCACG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGTTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAAGC ATGAAGAACT CGAG          354

```

## (2) INFORMATION FOR SEQ ID NO:726:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```
GAATTCGGCC AAAGAGGCCT AGAGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT    60
TCCGATTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT    120
AACTACTTTA TGTAACATTA CAGAACAGCT CGAG                                154
```

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```
GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA    60
TGACTATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT A'GTCTGTGC CCGGAAAAAC    120
TCACAGAGCT ATAGCAGATC ACTTGTCTG GAGTGAGGAA ACAAGAGTC GCTTCACGGA    180
GTATTGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCTAC ATGATGAGAG    240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA    300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG                                338
```

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```
GAATTCGGCC TTCATGGCCT AATTGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA    60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGTTT GCTCCAGAAT    120
TGTATTTCTG CTTTTCCTT TTTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC    180
CAGGTAAGTC AGCTTGTATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCAT    240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC    300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA    360
GAACTTTGT AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA    420
GTAGAGACTC GAG                                433
```

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```
GAATTCGGCC TTCATGGCCT AACAGAAAC ACCAAGTACC TCGACCTCAA GAATTCACAA    60
GAGATGCTCC GCTACAAAGA GGTCTGCTAC TACATGCTCT TTGCCCTGGC TGCCTACGGG    120
TGGCCCATGT ACCTGATGCG GAAGCCCGCC TCGGGCCTCT GCCAACTGGC TCGGTCCTGC    180
TCGTGTTGCC TGTGTCCTGC GAGGCCGCGG TTCGCCCTG GAGTCACCAT CGAGGAAGAC    240
AACTGCTGTG GCTGTAATGC CATTGCCATC CGGCGCCACT TCCTGGACGA GAACATGACT    300
GCGGTGGGAC TCGAG                                     315
```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```
GAGTTGTCTC TCTGAATTAA CTTTCTCACC AATAGCTCCT CTTTAAGATC AATAACTCTT    60
ATGTTTGCAC TTTTtaggCT ATTTTCTAGA TCTGTATGT GTGTCTTATT ATTTTATTAT    120
CTTTTGTCTC CCTCTGTGAA TTTTCAAATA GTCGAG                                     156
```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```
GAATTCGGCC TTCATGGCCT ACTTGAACCT AGATCTCACC CCCAGGATGT TGCGGAGGCT    60
GCTGGAGCGG CCTTGACGCG TGGCCCTGCT TGTGGGCTCC CAGCTGGCTG TCATGATGTA    120
CCTGTCACTG GGGGGCTTCC GAAGTCTCAG TGCCCTATTT GGCCGAGATC AGGGACCGAC    180
ATTGACTAT TCTCACCTC GTGATGTCTA CAGTAACCTC GAG                                     223
```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGATA TTGGTTAAAA AAAAAAGGA      60
GGAAGAGGCA GTTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCCA TGGTCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAACATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA ACACTTAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

## (2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAATTC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACG TGTCTTCTTC CTTTGTGGCA      120
GGAATCTTCA TCTCTGCCTA CCAACCAATT GGTGAGGAGC ATGCACCTTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAACAACCC AGACCATCCA GGTTCCTTCA GTGACCCCTA      240
TCTCATCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

## (2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACGTC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTCTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AACTGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTGG CAAAGACCTT      240
GGGACTCGAG                                     250

```

## (2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTAT AATGAACAGA AGTTTATTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```



ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300  
TGGAGTTTTG CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 259 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTG GTGAAGGAAG 60  
CCTCTGAATT AAAACTTTTA AATATTCTG ATTTGCAACC AGACGAAAAA GAAGAAAATT 120  
GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTT CTGGTTTTTC TGGTCTGGTT 180  
TTTGTGTGTTG TTTGTGTTG TTTTGCCACA GTTAGTTCC TCACCTGATC TTTCTTGTA 240  
TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGGA TGCCGCCAGC 60  
GTCCAGGTAC TGCGTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120  
GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTT 180  
AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTT CCCAGGGCCT CAGGTTTCGAA 240  
GGCTGTCTATG CCAGGGTCGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300  
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTT CGCACTTTGG TGTCTTCATC 360  
CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCCT CCTTCCTCC TTCCTTCCTC CCTCCCTCCT 60  
CTCTCCTCTC TTTCTTCCTT CCTTGCCTCC TTCCATCCTT CCCTCCCTCT CTCTCTTTCT 120  
TTCTTTCTTT CTCTCTCTCT CTCTTCTTT CTCTCTCTCT CTCTGTCTTT CTTTCTCTCT 180  
TTCTTTCTTT CCATCTTCTT TTCTTTCTAT CTTTCTTACT TTGATGTAG CTGTCACGAC 240  
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCTGT 300  
CCTATTCAAC AACATGAATT GGTTGTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTCAGTTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420  
AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 367 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTCACTTAA 60  
AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120  
CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TAGGCTCCTT 180  
TTTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240  
GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300  
GGAGACTTAA GATGCTTAAA TTTTGGTAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360  
GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG 60  
AGAGCCAGCT CAATCTATTG CAAGCTGGGC CTGGGCTTTC CTCACAACTT CCAAGAGACC 120  
ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180  
CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCACA AACAATGCAA AGATCTGGTT 240  
GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 318 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60  
TTCGGGGGCG CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGGTC CATATTCCAG 120  
TTTGGCAAAC CTCCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180  
CCCCTGCGG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240  
ACCCTCGCCA CCTCCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACACG 300  
AGCACCCCCG GCCTCGAG 318

## (2) INFORMATION FOR SEQ ID NO:742:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAACTATGC CAATGACTGA	60
GAAAGTTGAA GAATTGCTGC GTGTCATAGG TCCATTTTAT GAAATGTCG AGGACAAAAA	120
GAGTGGCAGG AGTTCGTATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA	180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCCAAG AAGAAGTGAA	240
AGGAGCAGCC CTCGAG	256

## (2) INFORMATION FOR SEQ ID NO:743:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 580 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC TTCATGGCCT ATGTTTTTAT AGCACCGATG GTACTGTTTT ATTTATTGCC	60
AATAGACCAC AACATTCACA TCTGTTTTTC CTCAGGGGAA CCGTATTTGC TTTTGGTTGA	120
AGGATTTATC TATTTGATAC TATCCAGAAT ATGTGAAGC TATAATTTC TGGGTTATAT	180
TTTAGATGGG TTGCTGTCAT GGTGGTAAAA TAAGCTTTTT CCTCTCGCCT ACGTCCTTTG	240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCGG AGCTTGGCAC	300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGCAGATTGG AGACGTGTGT GAGAGGAGCA	360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTC AAATGAAGAT	420
GCTCTCTCTA CCGCACGATC GGCAGTGAGA AAAGGAGGAT GAAAATCCTT CTCATCACA	480
AGAGCTTGAA GGAACCCACG TCCCCAGATT AGCAACCTA GAGTTCATCT GCTCAGGCCG	540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG	580

## (2) INFORMATION FOR SEQ ID NO:744:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 374 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC	60
CGCGAACCAC GGGCAAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGTATGC	120
TGTATTACAA GAAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA	180
AACTCTTCAG TTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT	240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCTCAGT GGATCTGTAG CTCACTCTAG	300
AGATGCCGGA AGAGAAGGCC TGAGAAGTGA CGTATTTCCA GGCCTTCCT TCAGATCAAG	360

CAACCCCTCT CGAG

374

## (2) INFORMATION FOR SEQ ID NO:745:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTCGGCC AAAGAGGCCT ATTGGTTTCC CTGCTTCCAT TCTTACTCCC CTACACTCTG	60
TTCTCCAAAA AATAACCAT GTGATCCTTT AAAATCCTGA CTCTCTCCTG CTCAGAGTCA	120
TCCAGTGGCT TCCCATATCA CGTAAAATGA AACCCCAATC GTCCTTACT CTGGCCTGCA	180
GGGGCCTGTG TGATGGGCCT TCTCCAGCTT CGTTCTTCCT TTCCTTCTGT TCTCCCCTCT	240
GCTTACCTAC TCCATCTCCA GGGCTTCTTT CCAGCTCAAG CCCTTTCCTG TTGAGAGCAT	300
TTGCTTTCCC CAGGGCACTC GAG	323

## (2) INFORMATION FOR SEQ ID NO:746:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GAGAACAGTG TTACCAAAGA AAAGGACATG TTCAATTTCA AACGAGCCCA GGAGGACATC	60
TCTAGACTTC GCAGGAAGCT GGAGACCACA AAGAAACCAG ACAATGTACC CAAGTGTGAT	120
GAGATTCTGA TGGAGAGAT TAAGGATTAC AAGGCACGCT TGACCTGTCC ATGCTGTAAC	180
ATGCGTAAAA AGGATGCTGT TCTTACTAAG TGTTTTCATG TCTTCTGCTT TGAGTGTGTG	240
AAGACACGCT ATGACACCCC CCCCGCGCTC GAG	273

## (2) INFORMATION FOR SEQ ID NO:747:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 666 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GAAGATCTTC GCTGTCCTCT CTGCCTCTAT CACACCAAAT ACAAGCGCAA CATGATTGAC	60
CACATCGTGC TGCACCGAGA AGAGCGTGTT GTCCCCATTG AAGTTTGCCG GTCCAAACTG	120
TCCAAATACT TGCAGGGAGT AGTTTTCCGC TGTGATAAGT GTACCTTCAC CTGCTCCAGT	180
GATGAGAGCC TCCAGCAACA TATAGAAAAG CACAATGAAC TGAAACCTTA CAAATGCCAG	240
CTCTGCTACT ATGAGACCAA GCACACGGAG GAACTGGACA GCCACCTTCG GGATGAGCAT	300
AAGGTAAGCC GTAACCTTGA GCTGGTTGGA CGGGTTAACT TGGATCAGCT GGAACAGATG	360
AAGGAGAAAA TGGAGAGCTC CAGCAGCGAT GATGAGGACA AGGAAGAAGA AATGAACAGC	420
AAGGCTGAAG ACAGAGAGCT GATGAGATTT TCTGACCACG GGGCTGCTCT TAACACTGAG	480

AAGCGTTTTC	CATGTGAATT	TTGTGGACGG	GCGTTTTCAC	AGGGCTCTGA	GTGGGAAAGA	540
CATGTGCTGA	GACACGGCAT	GGCATTGAAT	GACACCAAGC	AGGTGAGCAG	AGAAGAAATC	600
CACCCAAAAG	AGATCATGGA	GAACAGTGTT	AAAATGCCCT	CCATAGAGGA	AAAGGAAAGT	660
CTCGAG						666

## (2) INFORMATION FOR SEQ ID NO:748:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC	AAAGAGGCCT	AACAACCGAA	TATAGTACAC	GACCTTCCTG	CAGCAGTTCT	60
AAGCTACTGT	CAAGTATGGA	AAATCCCGGC	AATTCTGTAC	TTGTGTTATA	CTGATGTGAT	120
GAAATTAGAC	CTAATCACAG	TGGAAGCTTT	TAAGCCTATA	CTTCTACCA	GAAGCTTGAA	180
GGGTTTGTTT	AAGAATATTC	CCCAAAGCAC	TGAGATACTA	AAGAAATTGA	TGACAACNAA	240
TGAGATTGAG	AGTAACATTT	ATACATGATC	TTAAACATTG	TTTGTAGTG	TATATTACTT	300
GTCCATTCTT	TTAAGGGGAG	CAGCCTGCAC	TCTTTGTAG	ATTACTTTTG	GGGGATATAT	360
TTTGAGAAATG	ATGAAACGG					379

## (2) INFORMATION FOR SEQ ID NO:749:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC	TTCATGGCCT	AGGCGCAAGG	CCGAGCGTTC	CCAGCAGGGG	GAGAAACCTT	60
TCACACCCCA	GGCCCTTCAG	GAAGTGGGGC	CTTGCCCTTGC	AGCCACATGG	CCCCATCCCA	120
GTGGGGGAAG	CCAGGTGAGC	TCTGACCCTT	GGGCTGGGCG	CTCTGCCCTT	CCCAACCCAG	180
CCCTCGTCTC	CCTCGACAGC	GCCCCTGCTG	TCTTCCCCAC	CGCAGTCACC	ACCACCCGAA	240
ATGCCACGTG	GTCAGTGTGC	ACTGCCCTGT	TCATGTGCCT	CTGCGGGGCA	GGGCCTTCCT	300
GGTTTTGTTC	ACTGCTGTAC	CCAGATAGCC	TCGAG			335

## (2) INFORMATION FOR SEQ ID NO:750:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GCAAAGACCC	AAGAACTGAA	TATGCTCCGG	GAACAGACCA	CTGGGCTGGC	AGCTGAGTTG	60
CAGCAGCAGC	AGGCTGAGTA	CGAGGACCTT	ATGGGACAGA	AAGATGACCT	CAACTCCCAG	120
CTCCAGGAGT	CATTACGGGC	CAATAGTCGA	CTGCTGGAAC	AACTTCAAGA	AATAGGGCAG	180

```

GAGAAGGAGC AGTTGACCCA GGAATTACAG GAGGCTCGGA AGAGTGC GGA GAAGCGGAAG      240
GCCATGCTGG ATGAGCTAGC AATGGAAACG CTGCAAGAGA AGTCCCAGCA CAAGGAAGAG      300
CTGGGAGCAG TTCGTCTACG GCATGAGAAG GAGGTGCTGG GGGTGCCTGC CCGCTATGAG      360
CGTGAGCTCC GAGAGCTGCA TGAAGACAAG AAGCGTCAGG AGGAGGAGCT CCGTGGGCAG      420
ATCCGGGAGG AGAAGGCCCC GACACGGGAG CTGGAGACTC TCCAGCAGAC AGTGAAGAA      480
CTTCAAGCTC AGGTACATTC CATGGATGGA GCCAAGGGCT GGTTTGAACG GCGCTTGAAG      540
GAAGCCGAGG AATCCCTGCA GCAGCAGCAG CAGGAACAAG AGGAAGCCCT CAAGCAGTGT      600
CGGGAGCAGC ACGCTGCCGA GCTGAAGGGC AAGAAGGAGG CGCTCGAG      648

```

## (2) INFORMATION FOR SEQ ID NO:751:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

```

GGAAAGAATC TAAAAGAAGA GAAGCGACCG GTGCTTTTAA GGGTGTCTAA TTTTCAAAG      60
AGACGTCTGG GAGTATTTTG CTCTGGGCGT TTGGGTGAGC AGGACCGGGG CGTTGGAGGG      120
TGCGGCGGGC TTGGGAGCAG GGAAGGTTCC GAGTCCTAGG GAGGCGGCAG CGCTCGGCTA      180
TGCCCTCTGG AGACTGGCGG GGCTGCGGGG CCGAGGGGAC CCGCGAGGGA GCCGCGCTGC      240
GGACGCGCTG AGCGCGGGAG CTCGAG      266

```

## (2) INFORMATION FOR SEQ ID NO:752:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 288 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```

GAATTCGGCC TTCATGGCCT AGGATGTTTT AAGGCTAGGC CTGAGCGAGG AGGAGGCAGG      60
GGAGACCTGG CAGGTATTGA AGTACCTGGG AAGAAAGGCA ATGGGGATGG TGGTCCTGCT      120
CCAAGATGAT AAGTGGAGGC TGAGCGTCAC TGGTACTGGG GGCCATGATC CCCAGGGCCA      180
CCCTGGCACC AGGGTGACAG GGATGCGGGG CCTGAGCAGG AAGAACAGAG ATCTGCGGGC      240
TGCACCGACC CATCCCTGCC CTTAGGCTGA AGAACGGCAT CACTCGAG      288

```

## (2) INFORMATION FOR SEQ ID NO:753:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 487 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```

GAATTCGGCC TTCATGGCCT ACTGAATTG CTTTCTTGC CTCTCTTTAG TCACCTGTCA      60
CAGGAGGTTT CTGCTCAGTA ATGATATTGT GAGTTAGGAT AATAACTTTT TTTTTTTGT      120

```

```

GCTTCAGATT TAGAAGAAAA GATCCTGTTT CCATTGAAA GGAACGTAA GCTTTTATCT 180
TTTAACCAAC TGAACAATAC ACCAAAAGCA GCCTAGGGAT GAGCATTTCT TTGAAAGCAA 240
TTAGGTTATT CACCTGGTAT TAAACTATT TACTGTTAAA AAATCTGTGA CTTCATGAAG 300
TTGATTTTAA AAGGCAGCAT CAAAACTGA AAAGGAAGGG AAAAAATAGG CAGCTTCTCT 360
GCACTTGTTT GGAGTCCCG AAAACAGGAG CCATGGAGAA GTGGCATCAA GACCGGGCTG 420
CCCTTTCGAG AACACCCTGT GGCAGTTCAG AGACACGCTT TTCCTACACT GCATGCAGCC 480
GCTCGAG 487

```

## (2) INFORMATION FOR SEQ ID NO:754:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```

GCTGGGTTTA GGCGATCCTC TTGCTTCAGC CTCCCAAGAA GCTGGAGCCA CAGGCATGCA 60
CCACCACGCC CAGTTAATTT TTGTATTTT TGTGGGGACG GGGTCTCACT TTGTTGCCCA 120
GGCTTATCTG GAACTCCTGG TTTCAGGCAG TTCTCCTTCC TTAACCTCCC AAAGTGCTGA 180
GATTATAGGT GTGTGTGAGC TATCACACCT GGCCTAGAAA ATTATAAGAA AATATTAATC 240
ACATAATCTC ACTACCCATT GATGATTAA CATCTAGTAT ATACATATGT ATATATAATT 300
TTAAAAGTAG GGTATATTA TATAATTACT TCATTATTCT TGTTTCCAC TTAATATACT 360
TAAGATATCT TTCAAAATCA CTAAATACAG GAACATAGTA TATCATCTT CAGTAGCCTC 420
ATTGTATAGC TAACCCCTC GAG 443

```

## (2) INFORMATION FOR SEQ ID NO:755:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```

GAATTCGGCC TTCATGGCCT ATTGATTTC TGGGCTCAGG AGAGGATGGG GAAGGGGCTC 60
CAGACCCTCG GCGGTGCACT GTGGATGGGA GCCCCATGA GCTGGAAAGC CGTCGGGTCA 120
AACTCCAAGG CATTCTGGCT GACCTGCGGG ATGTGGATGG GCTGCCCCCA AAAGTGACTG 180
GCCCGCCTCC TGGCACACCC CAGCCCCGGC CACATGAAGG TTCCTTGGC TTCTCCTCAG 240
ACGTCTTCAT CATGGACACT ATCGGGGGCG GGGAGGTGAG CCTGGGGGAC TTGGCAGATC 300
TCACCGTCAC CAACGACAAC GACCTCAGCT GCGATCTGTC TGACAGCAA GATGCTTTTA 360
AGAAGACGTG GAACCCCAAG TTCACCTGC GCTCGCACTA CGACGGCATT CGTTCCTTGG 420
CCTTCCACCA CAGCCAGTCG GCTCTGCTCA CCGCCTCCGA GGACGGCAGC CTCAAGCTCT 480
GGAACCTGCA GAAGGCGGTC ACGGCCAAGA AGAATGCGGC GCTAGATGTG GAACCTATAC 540
ATGCTTTCCG GGCTCACAGG GGCCAGTGT TGGCTGGACT CGAG 584

```

## (2) INFORMATION FOR SEQ ID NO:756:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

```
GAAATTAAAA AAATAAAATC AAGTTCTTGG GTGGTGGGAA ATTGGCCTGT ATTTTTTCTT    60
CTCAGTGGAA TTTGCTGAGT AAAAAATTAT AGGCTCAAAA ACTGAGAACT TTGAAGATAT    120
TGCACCATAT TCTTTTTGTA TTGAGTGTG CTGATGAGAA GTCTGAGGTC AGTCTGTTGC    180
TTGCTCTTTC TAGGTAAACT GTGCTTTTTA TATTTTTTCC CCTCTAGAGG TTTTGAGAAT    240
TTACTCCTTA TCCATGTTAT TCTTAAATT CACCACATTC TCGAG                      285
```

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

```
GAATTCGGCC TTCATGGCCT AGAATGCTTT GAATCCATAT CTTTTTCAGA AACATACATG    60
GAAATACAGA ACTACACCTG TAATTACAGA GGGCATATGA ACCCTAGTTT GATAAGCCTT    120
GCTTTAAAGG ATGCAGTGTG TTCTATTAAA TGTATTTAAT ACAATTGCAG AAATGGAAAA    180
TGTGGACCTC CATTAAACAA ATTTTTTAGT TCCTAATGAG ATAAACTTGG GACCAAAACCG    240
ATTCCTCTTG TTTTAGTGCT CAAAATAGT TTCATTTTTA GGTATTTATG CTTTAGTGCC    300
CTTTCTCGAG                      310
```

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAA AGCAAGAACA GAAAACGAAG CCACAGGAAG    60
GGAAGTAGAC ATTGTATGCT TATGGTTTCT CATTATGAAG GTGCAGCTTG TAGGAGGTTT    120
GTACGGATGT GCTTTGAAGT TATGTATATT ACATATAACA GGAAAAATA TAAAATAAAA    180
CAGTGCTGGT CTCGAG                      196
```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:



```

GAATTCGGCC TTCATGGCCT ACAGCAAATC TGCCTTCACA TGGTCTGCAT TCTAGTGGAG      60
AAGTCAGATA GAGGTAAGTA CGAAGACCAC AAAGCAGGTT AAAAAGTAAG GTGGGAAAGG      120
GATGCTATTT TAGACAAGGT GGTCAGGGCA AGCCTCTCAG AAGAGGGGAT AAGTGCTCAG      180
AGACCTGACT GAAGTGAGAG TGAGCTATTG ACACGGAGAA GGGCATTTC AACTCTGAAG      240
AGAAAGCAGG GGCAGGCTTT GGAGGGAGAG CTTGTTTATG TAGACAAGGA GGGGCAAAGA      300
GTCTTGTTGA TAAAGCAGAA TGAACAAGAG TAAATGGGAT TGTAATGAA ATGACTCGAG      360

```

## (2) INFORMATION FOR SEQ ID NO:760:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GGACATATGC AGTCAAAAGT AGGTGCCCAT ATATATAATG AAATACCAA AGGACAATTT      60
AGAAGGTTGA ATGGAAACAT TATGGCATGC TTTAGACGTT CTGTTTGGT TTTCTTATTC      120
CCAGTCTTTG ATCTTTTAGG TCTATCCATT GGTAAAGATA TATTAGGACT CACATCAACT      180
CAAGGTCTCG AG                                     192

```

## (2) INFORMATION FOR SEQ ID NO:761:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GAATTCGGCC TTCATGGCCT AGTTTATTGC TCCCAACTAT ACATCTCAG ACTTCACTTA      60
GCATGTTACG GGTGGTTAGG TTCCAGGATT ATTGAGATCT ATTTCTACTC ACAATTGCTT      120
ATAAAATGAA ATCTATCGTC ACCTTAATTG CCTGTGCCTA AAAATATAGC ATGCTTGTCT      180
TGTGGGAAAT ATTCAAGCCTG GTATGTGAGT GACTGAAATG CAACTCCGTG GAAACACCCC      240
AACTCCACAC ATTCATCCCC TTGGTAACTC AGCACAGTCA CAGAAACTGA AGAAGTAAAA      300
TGATCCTCTT TATTGGCTT CTCGAG                                     326

```

## (2) INFORMATION FOR SEQ ID NO:762:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT ACTGGCCCAA GTGAACTTT TAACAGGCTT TTGGAGATC      60
TCTTTAGCTA GATCCAAAAA TTCATCAGGT ATATTTTCTG TTTTCCAAGT TCATGCAGGC      120
AATAGCTTTG CTAATATATA ATACTAGTTG CCTTGTTC A GCTGCCATAT CAGTTTCATC      180
ACTCCTTTCC CAGTGCCAC TCGAG                                     205

```

## (2) INFORMATION FOR SEQ ID NO:763:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GAACTTTCC      60
CTAACCTAAA AGTTTATTCT GTTTTAAAAA TAAATGAAAG TATTGTATG GGCCCTGGGC      120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC      180
CCACAGGCAG CCAAGTGCCC ACACATTTCG AGGCTGCCCT CCACCAGGGC AGCGACCTCG      240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG                      285

```

## (2) INFORMATION FOR SEQ ID NO:764:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

AATTCTTTAT CATTTCAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAACTGT      60
GTTACAAGAA TATTTGTTC CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG      120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTGGT ACCTTTAGGA      180
CGTTCAGCCA GAGGTGATTG GAGGGATTG CACGTCTACC ACTCGTGTGT GTATCTGTGA      240
ACCATATCTC CTTTAGTGCC TGCTTTGAA CTTATATAA ACAGAATGAT GCTGCCTGTT      300
TATCTCTATA ATTTCTTCT TTCCCTTAGC ACGTGCTCAC TCGAG                      345

```

## (2) INFORMATION FOR SEQ ID NO:765:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

```

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT      60
CTATAGGGTG ATAGATTGGT CCAATGGGT GTATCTCGAG                      100

```

## (2) INFORMATION FOR SEQ ID NO:766:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA    60
GATGGCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA    120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT    180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA    240
GAGAAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG    300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG                                333

```

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA    60
AGTGGAACTT TTGGAACATT GTTGAACCA GTAAGAATCC CATTCCTCAG GTATCAGGTC    120
GTTAAAGTAG TTTAAATATA CGTATTCCTT AATTTTCCTC AGCAGGTTCC CCCTCCCTTT    180
AACTTGTGTG TATAAATATA TGTGTGTGAT GTTTTCTCTT ACAAAGATAG TACTCGAG    238

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CCTAGGTGTG AACAGATTCA    60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT    120
TTGTTTTGTT TTTTGTTTTT GTTTGTTTTT GAGACAGGAT TTTGCTTTGT TGCCCAGGCT    180
GGAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG        234

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG    60

```

```

GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG      120
CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATGT      180
GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGAAGATGA ATGCAAAACC      240
TTGAGGCAGA AAGTGGAGAT TCTGAATGAG CTCTATCAGC AGAATCTCGA G          291

```

## (2) INFORMATION FOR SEQ ID NO:770:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT      60
TTGGTGAGGG TCCCCCTCTG CCTCTCACAG AAGCCCCTGG CCCTGGACTG TCCTGGGGGC      120
AGGGACACCT GTGGCTGGGG AAGGGATGGC CAACAGCGGG AAGCAGTTTG CGCCTGGTGC      180
CTGATGATGG TGAACCACGA GACAGATGGA GACGGGAGTC AGGGGACCCT GGGGACCCTT      240
CCAGGTCAG TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC      300
AACTCCTCAT CACCCCATGA CTTGGCCTGG AGGAACCTGG GGTGGGAAAC AAGTAGTCCC      360
CCAACCTCAG AGGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCTGC      420
TCAACGCTCG AG          432

```

## (2) INFORMATION FOR SEQ ID NO:771:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GGTGTGGCTT TGCCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA      60
AACGGGCCCT CAAATTTATC AAGAAAAGGG TGGGGACGCA CATCCGCGCC AAGAGGAAGC      120
GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAAGC TGCTGCCAAG AAAGACTGAG      180
CCCCCCCCCT GCCCTCTCCC TGAAATAAAG AACAGCTTGA CAGAAGCCCT GGCTCTCCTG      240
CTGTCCGTGG GTGGGTGTGG GTGTGTCGGG GGCCCGCAGT CCCCTGTCTG GTGCCCCGTC      300
TGAGCCACAC CCTCTCCGGG TGCTGCCTGG TCGTGAATCA AAAGCCGTGG CCCGCCACC      360
CTCCCCGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG          399

```

## (2) INFORMATION FOR SEQ ID NO:772:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

GAATTCGGCC TTCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC      60

```

```

AGTTGAATCT AAACCGGATA AACCATCGGG AAAGTCAGGC ATGGATGCTG CTTTGGATGA      120
CTTAATAGAT ACTTTAGGAG GACCTGAAGA AACTGAAGAA GAAAATACAA CGTATACTGG      180
ACCAGAAGTT TCAGATCCAA TGAGTTCCAC CTACATAGAG GAATTGGGTA AAAGAGAAGT      240
CACAAATCCT CCAAAATATA GGGAACTATT GGCTAAAAAG GAAGGGATCA CAGGGCCTCC      300
TGCAGACTCT TCGAAACCCA TAGGGCCAGA TGATGCTATA GACGCCTTGT CATCTGACTT      360
CACCTGTGGG TCGCCTACAG CTGCTGGAAA GAAACTGAA AAAGAGGAAT CTACAGAAGT      420
TTTAAAAGCT CAGTCAGCAG GGACAGTCAG AAGTGGTGCT CCACCCAAG AGAAGAAAAG      480
AAAGGTGGAG AAGGATACAA TGAGTGATCA AGCACTCGAG      520

```

## (2) INFORMATION FOR SEQ ID NO:773:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC AAAGAGGCCT AGTTTATTGT TTGCATATAT TTTATAGTGT AGAGATTAGG      60
CATTTTAATA AAATTTTAAA ATTTCCAGGA TCTTACAGAA TGCTTTTATG TTACAGCTTA      120
CTCCTCGAG      129

```

## (2) INFORMATION FOR SEQ ID NO:774:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAATTCGGCC TTCATGGCCT ACACAACGGA AAGCTGTTTT TCTGATCGAG GCTCTCTGAA      60
GAGCATAATG CAGTCCAACA CATTAAACCA AGATGAGGAT GTGCAGCGGG ACCTGGAGCA      120
CAGCCTGCAG ATGGAAGCTT ACGAGAGGAG GATTCCGAGG CTGGAACAGG AGAAGCTGGA      180
GCTGAGCAGG AAGCTGCAAG AGTCCACCCA GACCGTGCAG TCCCTCCACG GCTCATCTCG      240
GGCCCTCAGC AATTCAAACC GAGATAAAGA AATCAAAAAG CTAAATGAAG AAATCGAACG      300
CTTGAAGAAT AAAATAGCAG ATTCAAACAG GCTCGAG      337

```

## (2) INFORMATION FOR SEQ ID NO:775:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GAATTCGGCC AAAGAGGCCT AGTGAGCGCG ACCATCATGT CCATGCTCGT GGTCTTTCTC      60
TTGCTGTGGG GTGTACCTTG GGGCCAGTG ACAGAAGCAG CCATATTTTA TGAGACGCAG      120
CCCAGCCTGT GGGCAGAGTC CGAATCACTG CTGAAACCCT TGGCCAATGT GACGCTGACG      180

```

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGGCCAGGAG 240  
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60  
CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120  
CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTGAGAAGT GTGGTGGCTG ATACTGACCA 180  
AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240  
GAAAAAAGAA ATTCCAGTGT CAATTAAAAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC 300  
CACTGAACCT CAGCCTGTTC TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA 360  
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAACTATT CTGCCACCAG AATCTGAGAA 420  
TCCAAAGGAA AATGATAATG ATTCAGGCAC TGGTTTCCACT GCTGATACTA GCAGTATTGA 480  
CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAACTAAA GACAGTGGAT CGATATCTTT 540  
ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 463 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60  
CTGAGATTTC TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120  
AGCTTCAAAC AATTAGAAAT TGTAAATACC ATTATGAAAG TGATGAAAAT TGTATTGCTT 180  
AGTATTCTAC CAAAATTATG AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240  
GGGCCACAAG NGCNAAAATT TGTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300  
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTCTTGT ATTTCACCAG TAATTCATAA 360  
CCACAACCTGT TGTGTCTTGA AACTTACTA TGCTTGGCAT ACTTATAATT TTTATTTCAC 420  
TTTATCCTCA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCTGGGAGT TACCTGNTAT CCTGATGGTG CCATGTGCTA      60
GCTGGGTGAC AATAACCCAG CCACCTAACA TCTCAAAGAT TGTTCCTTTT TGTGTGAAAT      120
AGGGATAGAG TTGTCTACTT CCCAGAGCCA GATAGAGAAC TTAAGAGATG AATCTGAAAA      180
TACAATAGCC TAAATAAATT CAAGGAAACA CTATTATCTT ACTGGATCTT TCCAGCAACC      240
ATGTTACTTT TGGCTGGATT TTGTATTTTC CAATTTGTGA ATGACACAAC AAAGAGCTAG      300
GTAGGTAAAG TAAATGGTTT CAGATAATAA GCCCAGTTAG CCCAGACGTT TATTTTCCAT      360
TTGCATAGAA AATGAATGTT TTATGCATAC ATTTGTTTGC CCAGGGCTAG GATATTACTT      420
GCATATGATG TTCTTATATA ATTAAAAAAA AGAATACAAC CTCGAG                      466

```

## (2) INFORMATION FOR SEQ ID NO:779:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AATTCACAG GGAAATGGGC AGACTGAACC AGTCCAGGTG      60
GTGAATTTTC CAAGAACATA GTTTAAGTTG ATTAAAAATG CTTTLAGAAT GCAGGAGCCT      120
ACTTCTAGCT GTATTTTTTG TATGCTTAAA TAAAAATAAA AATTCATAAC CAAAGAGAAT      180
CCCACATTAG CTTGTTAGTA ATGCTCTGAC CAAGCCGAGA TGCCCATCTT CTTAGTGATG      240
GCGGCGTTAG GGTTTGAGAG AAGGGAATT GGCTCAACTT CAGTTGAGAG GGTGCAGTCC      300
AGACAGCTTG ACTGCTTTTA AATGACAAA GATGACCTGT GGTAAGCAAC CTGGGCATCT      360
TAGGAAGCAG TCCCTGGAGA AGGCATGTTC CCAGAAAGGT CTCTGGAGGG ACAAACTCAC      420
TCAGTAAAAC ATAATGTATC ATGAAGAAAA CTGATTCTCT ATGACATGAA ATGAAAATTT      480
TAATGCATTG TTATAATTAC TAATGTACGC AGACTCGAG                      519

```

## (2) INFORMATION FOR SEQ ID NO:780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```

GAATTCGGCC TTCATGGCCT ACTAGACCCC CGCCACAGCA GCCTCTGAAG TTGGACAGCA      60
AAACCATGTC TTTACTACCC ATCGGTGTCC ATTTATAGAA TAATGTGGGA AGAAACAAAC      120
CCGTTTTATG ATTTACTCAT TATCGCCTTT TGACAGCTGT GCTGTAACAC AAGTAGATGC      180
CTGAACTTGA ATTAATCCAC ACATCAGTAA TGTATTCTAT CTCTCTTTAC ATTTTGGTCT      240
CTATACTACA TTATTAATGG GTTTTGTGTA CTGTAAAGAA TTTAGCTGTA TCAAACCTAGT      300
GCATGAATAG ATTCTCTCGA G                                           321

```

## (2) INFORMATION FOR SEQ ID NO:781:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

GAATTCGGCC	TTCATGGCCT	AAATGGGAAT	CATCATTGCA	TAACAAACCT	AAAGAGAAAA	60
TGAGAACATT	TACGAAGAAG	AAACAGAGTT	ACTGTACCAA	GGGCAAAAAG	AAAAGAAGGG	120
GGAAAAAAA	TAAGTCCATA	AAAGAAAAAC	AAAAGGAATC	CATGAGCCTG	GACGACAAGC	180
CGTGGGGGAT	GTAAGAAGGT	TTGGAACCCA	AAAGGCAAGT	CTAATCAGCT	GGGGTAACAT	240
GGCGAGGCAG	TTCCACATGC	TGAGACTTGT	GGCTACCACA	TTAAAAAAGA	CTGTGCATAT	300
TCTAAATGAC	AGCAGTCCTG	CAGTGACGTG	GATATTTACT	CTAGAAGCTA	TGCAGGCAGG	360
CGTGGGAAAA	GCGAAGAGAT	GTTGCACCAT	GCAGCTGCAA	TCTTTATGTC	TCTACTGGCA	420
CAACCGAAAA	GAGTAATGTG	GAAATTATCC	AGAGAATTTA	GGTGAGAAAA	ACAGAAGCCA	480
TCAGATTTTC	TCCTTTAAAT	CTTCAGAGGG	GTATACACTC	CCCTGGAAAA	CCAAGTTGCC	540
TCTCTGCTCA	CATCCTCGAG					560

## (2) INFORMATION FOR SEQ ID NO:782:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

GAATTCGGCC	TTCATGGCCT	AGGGGAGTCC	TCATTCTGAC	CTCAAAGAAA	GGACTGTATT	60
GTCTGGCTCC	ATAATGCAGG	GGACACCAAG	AGCAACAAC	GAAAGCTTTG	AAGATGGCCT	120
TAAATATCCC	AAACAAATTA	AAAGGGAAAG	TCCTCCCAT	CGAGCATTTG	AAGGTGCCAT	180
TACCAAAGGA	AAACCATATG	ATGGCATCAC	CACCATCAAA	GAAATGGGGC	GTTCCATTCA	240
TGAGATTCCA	AGGCAAGATA	TTTAACTCA	GGAAAGTCGG	AAAACCTCCAG	AAGTGGTCCA	300
GAGCACACGG	CCGATAATTG	AGGGTTCCAT	TTCCCAGGGC	ACACCAATAA	AGTTTGACAA	360
CAACTCAGGT	CAATCTGCCA	TCAAACACAA	TGTCAAATCC	TTAATCACGG	GGCCTAGCAA	420
ACTATCCCGT	GGAATGCCTC	CGCTGGAAAT	TGTGCCAGAG	AACATAAAAG	TGGTAGAACG	480
GGGAAAATAT	GAGGATGTGA	AAGCAGGCGA	GACCGTGCCT	TCCCGGCACA	CGTCAGTGGT	540
AAGCTCTGGC	CCCTCCGTTT	TTAGGTCCAC	ACTGCATGAA	GCTCCCAAAG	CACAAGTGGT	600
CCCTGGGATT	TATGATGACA	CCAGTGTCTC	GAG			633

## (2) INFORMATION FOR SEQ ID NO:783:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

AAATGACACT	GAATGACACG	TTAGCCAAAA	CTAACAGAGA	ATTATTAGAT	GTGAAGAAAA	60
AATTTGAAGA	TATAAATCAG	GAATTTGTAA	AAATAAAAGA	TAAGAATGAA	ATATTAAAAA	120
GAAACCTGGA	AAACACTCAG	AACCAAAATA	AAGCTGAGTA	CATCAGCCTG	GCAGAGCAGC	180
AGGCAAAGAT	GAGCTCGCTA	AGTCAGAGCA	TGAGAAAAGT	GCAGGATAGT	AATGCTGAAA	240
TCTTGGCCAA	CTACAGAAAA	GGCCAAGAAG	AGATTGTGAC	ACTGCATGCC	GAAATTAAG	300
CCCAGAAGAA	GGAGCTCGAC	ACAATACAAG	AATGCATTAA	GGTAAATAT	GCCCCAATTG	360
TCAGCTTTGA	GGAGTGCGAG	AGAAAATTTA	AAGCAACAGA	GCTCGAG		407

## (2) INFORMATION FOR SEQ ID NO:784:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```
GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAAACTAACT    60
TTTGAGAATA TTATGGAAAA ACTGCGAATC AAGTATTCCG AAATGTACAC CATAGTCCCT    120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG    180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA    240
ATTAACAATG GGCTTCATAA TGTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG    300
AAAGCTCAAG AAATCAAAA GAAATGTGG GACTCACTCG AG                                342
```

(2) INFORMATION FOR SEQ ID NO:785:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 456 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```
GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA    60
GAAGCCAAGG AATTTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTGTCCTTC    120
CAACATTTCC AAGAAGTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTACACCTT    180
GGAGACCAGT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG    240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTTT AACAAATTCT    300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA    360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTTAGAA    420
TGCCAGCNGA TTCAGGAGTA TACCAGTGCT CTCGAG                                456
```

(2) INFORMATION FOR SEQ ID NO:786:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 488 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCAGT TGTATCCAAG    60
GCAGTCAGAC AGGGGGATTT GGGCTGTGTT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC    120
GACGGCGGTC GGGGGACACC TGCAGTGAGA GGCTCCCCTC TCAGCACACT CGTCTCGCTT    180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACTT CCAACAATTC CTCAAAATCA    240
TCCACAAAGA ACTCCTTCAG TGGAGGGCGC TTTGGCCTCT TCAGGGTGTT CAGAAGCTGC    300
TGGATTTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC    360
CCGCTGCACC CCGAGGAAC ACTTCTCACA GAAGCCACCT GTGGACGCTC AAAGTACGAA    420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG    480
GCCTCGAG                                488
```

## (2) INFORMATION FOR SEQ ID NO:787:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```

GAATTCGCCT TCATGGCCTA AGTGTCCGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAACCC TCAGGACAGA CCCCGCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG      180
GTGCGCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCCG AGCTTCCAGA TGGTGGCAGC      300
GCTCAGCAGG GGCAGCACCA GCCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT      420
GTCCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452

```

## (2) INFORMATION FOR SEQ ID NO:788:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAATGTA TGAATATCAA AGTCAGGTGG TTCTTGTAAG AAACCTTCAT GTTAACAAAA      240
CAATGAAAC AATCAGACAT GAAATATAAC CGTATGTTCC TAGTTCAGCA CAAATGACAA      300
GAAGGAAATT CCAAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTTAGA AAAAGTCACA AACTCGAG                                     388

```

## (2) INFORMATION FOR SEQ ID NO:789:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 457 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTTTGA GAGTACAAAT CATTTTGTGA      180
CAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCAA AGCATTTCTT      360

```

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTTCCTCAA GAAATGCTGA GAATGGGAAT 420  
 TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

(2) INFORMATION FOR SEQ ID NO:790:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 582 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTTGC 60  
 TACAGTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120  
 CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCTGCCCC AACATGCAGG TTGAAGGTGT 180  
 TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCTG 240  
 AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGCAGCCCT 300  
 GCCTGGAATT GTTCATCGAT CTATTGGGCT TCCTGATGTC CATTCAGGAT ATGGGTTTGC 360  
 TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCTGAA GCAGTAGTAT CCCAGGTGG 420  
 TGTCGGGTTT GACATCAACT GTGGTGTCCT CTTGCTAAGA ACCAATTTAG ATGAAAGTGA 480  
 TGTCCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540  
 GGGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:791:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 468 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTTCCT 60  
 CTACAGTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTTGTG TGGGCTCCAG 120  
 TTCTCACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAAG 180  
 AGCTCTGAAC TGTATTGAGA CCGACTGGGT ATCTAGCTTA CTGTTTAAAC ATCATTGTTG 240  
 AAACCAGACC CTGTAGTCCA GTGGTGCTGC CCTGTTGTGC AAAGTGTCTC TTTTCTCGT 300  
 GTTTTGTGTA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360  
 GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420  
 AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 519 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

GAATTCGGCC	TTCATGGCCT	ACGTGGCTAT	AACTGGAAAA	CTGGATCCGA	AATCGACCAG	60
TAAACTGGGT	AGCTCGGTCT	ACGCCCCGCC	CACCACCCTT	GCTAGCCAAT	AGCCTTCACA	120
ACTCTTCTGC	CACTCCCGCC	CATTCCAGTG	CTGTGCCGCT	GCTTTTCTT	CCACTCGGAT	180
CTCTTGAGCG	CCCTTAGCCC	GCTGTATACG	CGCCCTCCT	CGGCTTCAGT	AGGCAAGAGG	240
GCCATCTGCC	CTTCCTTCCT	GAAGGTAGAG	GGGACAACAC	CAGCTACGAC	GGGGACTCCA	300
GAAGTCCATC	TCCCGAACAG	CAGCGGGGCG	AAAAGAAAGA	AAAAGGGTTT	CCGAAGACTC	360
CTACTCACAC	CCACGCTTTC	CCTTAACCCG	GAAGTGATT	CCGCCCCTCC	TCTCCCTCTT	420
CGGTTGATAC	TGGAGGAGAA	GGACGGCCAG	GTCTGGCCCG	GCATGCCCTG	GGCTTCGGGT	480
GACCTCTGGC	CCTTTTCTGT	CGTCCACTCT	CCGCTCGAG			519

## (2) INFORMATION FOR SEQ ID NO:793:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

GAATTCGGCC	AAAGAGGCCT	ACAGAAACAT	CCAATTCTCA	AACTGAAGCT	CGCACTCTCG	60
CCTCCAGCAT	GAAAGTCTCT	GCCGCCCTTC	TGTGCCTGCT	GCTCATAGCA	GCCACCTTCA	120
TTCCCAAGG	GCTCGCTCAG	CCAGATGCAA	TCAATGCCCC	AGTCACCTGC	TGCTATAACT	180
TCACCAATAG	GAAGATCTCA	GTGCAGAGGC	TCGCGAGCTA	TAGAAGAATC	ACCAGCAGCA	240
AGTGTCCCAA	AGAAGCTGTG	ATCTTCAAGA	CCATTGTGGC	CAAGGAGATC	TGTGCTGACC	300
CCAAGCAGAA	GTGGGTTCAG	GATTCCATGA	ACCTCGAG			338

## (2) INFORMATION FOR SEQ ID NO:794:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

GAATTCGGCC	AAAGAGGCCT	ACCAGGATGG	TCTCAATCTC	CTGACCTCAT	GATCTGCCTG	60
CCTCGGCCTC	CCAAAGTGCT	GGGATTACAG	GCGTGAGCCA	CCGCACCCGG	CCCTAAACCC	120
TAGGTTTTGA	CTTCTGTAAG	AAGGAAAGAT	TTAAACAAAC	AAACAAACAT	TAAATTACAA	180
CCATAATAAA	CAAAAAACA	CTAACTAAA	TTACAACCAT	AATAAAATCT	CCCAAAGTCC	240
GTAGGCACTG	ACATATTACA	GCCTTGCCAA	ATCAGAATAG	ATTCTCATG	TGTTGTCAAT	300
TTACCAGACA	CAAAGAGTAG	CTCAGATCTC	ATAGACTCTT	CAGATCTTGT	AGACTAATTT	360
CAAGTCTTTT	TAAAGTTTTG	AAAAACATGT	GCTATTTGGA	ATTACGTCAT	CCTCGAATAT	420
TAAACCTGAG	CTCAAAAACC	TATTGTTTGA	TATTGGAAAT	AGTTAACTCC	AGTTTTCTTC	480
TATTAAGATA	AAATTCTTTC	ATCATGTCTG	TGCCCTCTAA	AATAATACTC	CTATTGCTTT	540
GTCTTCCCCT	TCTCCCCTCC	TAGTCCTTCT	TTAGTCATT	TATTTAGAAT	CAAGTCGCTC	600
ATGAGTTTAA	GAATTAGAGC	AGCAAGAAAT	TGGGCTAGAG	ATGTACAAAA	GCTTTGGACA	660
ATAGTAGTTT	TGCTTGTCCT	CATTCTTATT	AGAAGTGCTG	TTAATTTACT	GATAAATTCT	720
AGGACGGAAG	ACAAATCTTT	GCAACTGGTA	CTCGAG			756

## (2) INFORMATION FOR SEQ ID NO:795:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```
GAATTCGGCC AAAGAGGCCT ACCAGGAAGC TCTCCTGCTT GTCATGAAGT GAGAACAATG      60
AAAAGTCATA GCAGATACTC AGTTTAACTC TGTGTAGAAC CTATTAGTGT TTGAGCTGTT      120
ATTCAGATTT GAATTCAGAC TGTGTGTTGT TTGCTTATGG ACACTGCCTG TCGTTCTGTC      180
ACTGTTAAAT TAATGAGTCT ATAAGGTTTT TCTTCCAGAG GCCATAGGTG ACATCACTAA      240
AATTGCAAGA TAAATTGTAA TCTTTGNTGN TGCTGCACTC CCCAACCTCT CCCCACCCC      300
CCGTGGTGTG CTGCTTTCTA GATGAGCGTG TTTTGGAGCA GGCCCATCTG GGACACTCTA      360
TGCTTTTACC AAGGAAGTGC GATCTGAGCA GCCACAATCC AGCCAAAAGA GGATCGTAGA      420
TATTTGCTCT GATCAACTAG ATGAAAATAT AGCAGAATGG ATTTAGCCCA CTGCTCTGTT      480
TTATCCAAC T GAGTCTCTGA CCAGCAATTG GTGCATAATT ATTACAGCAA AAGTTAAGAA      540
ATGAAACTGT AGCAATTATG TAAATGAATG TGTTGGCCTC TTAATACCTG TTACTAGTGG      600
ACTTCCTGTG AGGAAGTTAG TTTTGTGTTT TGATGAAATG CTCTCGAG      648
```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```
GAATTCGGCC AAAGAGGCCT AAGAGGCTGG CCCCAGTCCC AAGGAACAAG AGATGGTCAA      60
GTCGCTAGAG ACATATCAGG GGACATTAGG ATTGGGGAAG ACACTTGACT GCTAGAATCA      120
GAGGTTGGAC ACTATACATA AGAACAGGCT CACATGGGAG GCTGGAGGTG GGTACCCAGC      180
TGCTGTGGAA CGGGTATGGA CAGGTCATAA ACCTAGAGTC AGTGTCTCTG TGGTCTTAGC      240
CCATTTGAGC ACCCTGCCAC TTGGAGTGGA CCCCTCCTAC TCTTCTTAGC GCCTACCTC      300
ATACCTATCT CCCTCCTCCC ATCTCCTAGG GGAAGTGGGC CAAATGGTCT CTCCCTGCCA      360
ATTTTGGTAT CTCTCTGGC CTCTCCAGTC CTGCTTACTC CTCTATTTT AAAGTGCCAA      420
ACAAATCCCC TTCTCTTTC TCAAAGCACA GTAATGTGGC ACTGAGCCCT ACCCAGCACC      480
TCAGTGAAGG GGGCCTGCTT GCTCTTTATT TTGGTCCCGG ATCCTGGGGT GGGGCAGAAA      540
TATTTTCTGG GCTGGGGTAG GAGGAAGGTT GTTGAGCCCA TCTACTGCTG CTGTACCCTA      600
GAAGCTCGAG      610
```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```
GAATTCGGCC AAAGAGGCCT AGCCACTATC CTGGTTACTT GTGGATTAC CAAGCAGTCC      60
AGCAAGTCAT CCGTAGAAAT GAATGTTTGA GGAGTCGTAG TAGTATTTGA GGCAATCTGT      120
TCCTCAATTG CATTTTCACT GTTGCTCATT ATTTGTTGTC TCTTGGCACA ATGCAATTTT      180
CCAAAGTGTT CTCCATCCTT GTCCACAAG TCTTTCCCAT CACTTCCAAA TATGCCTCCT      240
```

CTTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 163 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTAT TGGTTTGGAG ACTAGAGCCA ATAGTATAAT	60
GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCTAA CTTATATGAT	120
TTTTTTTTTG TTTTGTCTG GTAGTTATGG CACTAGTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:799:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 443 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT	60
TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA	120
TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG	180
ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTTGT CTCTGCTCCA CTGTGTCTTC	240
CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC	300
TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA	360
GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA	420
GTGTGGCTCC TCCTGGGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:800:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 305 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG	60
AACTCTGGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTATCCCC TGCACAGGCG	120
AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCTTA AATGGCGGCC	180
CTCCAGCAC GCGCATCACA CTTGAGTTCT TCAAATGGGC CAGTGATGAG ATGCCATCCA	240
CCAGCAATGG TGAAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:801:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 464 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```
GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGTCACTAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTGTG ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAACCCGG      240
TATATATGTA TGCATTAATT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAAATATAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAATTGTC CAGGTTTTCT CGAG                      464
```

(2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 650 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```
GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGTGAT      60
TTGTATCAGC AGGGGGAAAG GTCCTTACTG TTTTTCAGAG CCTACAGTTG TGATAGAGGC      120
TCCTCCACAG CCGGCCACAG GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTGTTT TGTTGGGGGC AGCATATGGA ACCCAAAAAT AGTATCATAG      240
CCTAAATTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGCGC CTGTCAGCAG      360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAACTG ACGCCCGGAT AAATGCCCAA      420
GCCGCCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCCCTCC ATCCTGTGAC      480
TTGGATACAG TTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACTTAG TCAATGAAAA ATGATTGTGA AACTCTTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAAATGAT AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG                      650
```

(2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```
GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAATTC TAAGTAGCCA      60
ACTGATTGTC AGTGCCAGAA ATGAATACCG ATCCACTCGA G                      101
```

(2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 723 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```
GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTA CTTCAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCTAGTGT CATTGTATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCATGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTGCTG AGGTACCGCA CGGACACTGG CTCCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTTGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG                                                                                   723
```

(2) INFORMATION FOR SEQ ID NO:805:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```
GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GGCGCCAGTC AGGGAGCGGC      60
CGTGGCCCAG ACAGTGAGGA AGCGCAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCATGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATTT TATGAGCTCC CCACAGTACT CTCGAG                                                                 406
```

(2) INFORMATION FOR SEQ ID NO:806:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```
GAATTCGGCC TTCATGGCCT ACGCCCGGGT TGAAGTGTG CAGTCAATGA GCTCCCCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCGGT GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTTC CTGAGGGCTT CCTGCTGCTT CTTCCGCAGG GCTGTGTTAC GCTGCCAGTT      180
```



```

TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTGGGGC   240
TTTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT   300
CCGCTCAGCC AGCTGGGTGT TCCCTCGAG                                     329

```

## (2) INFORMATION FOR SEQ ID NO:807:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 225 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

```

GAATTCGGCC TTCATGGCC T AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT   60
TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTTAC   120
CCTTCAACAT TAATATTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA   180
TAAAGATGA ATATAAAATT ATTAATTAAC CAACTGGCGC TCGAG                     225

```

## (2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

```

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG   60
CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT   120
TTTTCTTTTT TTTGAGACAG AGTCTCGCTC TGTTGCTCAG GCTGGAGTGC AGTGGAGTGA   180
TCTCAGCTCA CTGCAACCTC TGCCTCCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC   240
GAGTAGCTGG GATTACAGGC CCCACCAAC TCGAG                               275

```

## (2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

```

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTAA ATTTGAAGAT   60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAACTT   120
TATTTTAAA GTCCTTTCCC GTTAGAATG CGGCATACTC TTGCTTGTTG GGTATATATC   180
TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTTCATGGCT CCTTGCCAAC TACAAAATTG   240
CGATATCCTC GAG                                                         253

```

## (2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGGG AGAGACAAAA    60
AAGAGAAAGT CTTTGAAAAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAAG    240
AGAAGTCGGA CAAAGAACAT TCCAAGGAGA GGAAGTCCTC GAG                      283
```

(2) INFORMATION FOR SEQ ID NO:811:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```
GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTTATGT    60
TATGTTTTTT GTTTGTTTCT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCCACCCTT    120
CAGCAAGACA CTTCCAGTA AGCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCCGT GGAAGATAAT GATGAAACT ATATTCATCC    300
CACAGAAAAG CTCGAG                      316
```

(2) INFORMATION FOR SEQ ID NO:812:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```
GGGATGCATA GATTTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGT    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TTATTAAAGC ACAAAATTAA ATCTCTCCTA    120
TTTTTATATG ATTTCCCGTT GTTTTCTTCC CTGTAGGGAA ATCTGCTGTG ATAGAGAACT    180
GCGTAACAGG CCTTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                      256
```

(2) INFORMATION FOR SEQ ID NO:813:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GCAAGCGGCG	CATGCAGGAG	GAGAAGCAGA	AGTCTGTCAA	CGTCAAGAAG	ACCATCCTGG	60
AGATGCGCTA	CGGGGCTGAT	GTGGATGCCG	GCTCCATTGT	GCACGCCGCC	CAGAAGCTGG	120
GCGAGCCTCC	CGTGCTGCCC	GTATCTCGCA	TGGCCTCCAT	CCCCTCCATG	ATCGGGGAGA	180
AGCTGCCCCAC	CGCCAAGGGG	TTGGAGGCCG	GGCTGGACAC	ACCCAAGGTA	GCCACCAAAG	240
GCAACTATAT	CGAGGTGCGC	ACAGGCGCCG	GCGGGGACGG	TCTGGCTCGG	CCCGAGGATG	300
ACCTCCCGGA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCGGCC	TTCATGGCCT	ACGAACTCCT	GACCTCAAGT	GATCGGCCTG	CCTCAGCCTC	60
CTAAAGTGCT	GGGATAGCCA	CTGTGCCAG	CCTAGCCCTT	CTTCAAATGT	TTGGTAAAT	120
TCAGCATTGA	AGCCATCAGG	TCTTGGGCTT	TTTGCTGGGA	GATTTTAT	TATGGCATCA	180
ATCTCATTAC	TTGTTACTGG	CCTGTTTAGG	TTTTCAGTTT	TTTCATGGTT	CAATCTTGGT	240
AGGTTGTTTG	TGTCTAGGAA	TGTATCTGTT	TCTTCTAGGT	TTTCCAGTTT	CTTGCGGTAT	300
AGTTACTCAT	AGTAGCCACT	AATTATCCTT	TGGATTCTTG	CGGTATTGGT	TGTAAGTCTC	360
CCATCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAAGCCTAT	CTTTTAGTCT	60
TCCTAGAAGC	ACCGTGTTCT	GTGGAATCA	GCATCAGCAG	CTTTGCTGAG	GACTCCCCCA	120
TCTTCCTTTC	CTTCCCCGGA	AAGCACAGAC	CTAAGTGAGT	CTTCACTGGA	TCCCAGCTAA	180
CAGCTTCTGC	CCATTCCTAT	CTTCCACAG	AGCCAGTGGC	AGCCCCAGCT	GCAGCAGCTA	240
CGTGACATGG	GCATCCAGGA	CGATGAGCTG	AGCCTGCGGG	CCCTGCAGGC	CACCGGTGGG	300
GACATCCAAG	CAGCCCTGGA	GTCATCTTT	GCTGGAGGAG	CCCCATGAAC	TCCCTGCTTC	360
CCCTGAACCC	CCAGCACTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GCCACGGTGC TCATTCAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC	60
ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT	120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAACTT	180
CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCC GGACTGTTGA GATAATCCAG	240
GTGGACGAAG ACATCCAGC TGCAACATCT CGAG	274

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC TTCATGGCCT AAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA	60
NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTTGCAG TGAGCTGAAA TCATGCCACT	120
GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAAT AGCGAGAGAT	180
CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG	240
TTACAGGGTT TCTTTTGGGG ATAACGAAAA TGTCTAAAA CTGGACTGTG GTGATAACTG	300
CACAACTCTG TGAATGTACT AAAAATACT GAACTGGCCG GGCGCGGCAG CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT	60
TCATAGAGAT ACTATCATCC TCATTCATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA	120
TTGCCAAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GGTTGGCCTT	180
CGAG	184

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGAAGCTTT      60
TCAATATCCT GACGTTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA      120
TCGATATTTT TGGAGGTCCC CAGGGGTTAC CAATGTGCAG ACAGGTTTGG GAACCACTGC      180
ATTAGGCATT TTACATTTAT TTAGGGCTTT CACTGGATTT GTCACCCCAT ACTTTCATAA      240
TCCATTTTTT CTGATTTTTT TTCTGGTTT TGGTGAGGGT ATAGTTGGGA TGGGGTTTTT      300
TTTTTGTCC TCCCACCGCT CGCCCCATC CAGTGTGGAC GTACTCGAG                    349

```

## (2) INFORMATION FOR SEQ ID NO:820:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 167 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT ACTCTTTCCT TGAAGAATTT GTTGAAGACT TCAGAAGTGA      60
TGCTGGCTGC TTTCTTCATT AGGTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG      120
CCCAACTGC ACTGATATCT ATTTGTCAA AGCCTTCAGG TCTCGAG                    167

```

## (2) INFORMATION FOR SEQ ID NO:821:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 733 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAAGGGAG TCAGCAAAAC CAGAAATTC      60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAACTGGAGA GGAAGTCGAA      120
ATCTATCATT GATGAATTTT TACACATTAA TGATTTTAAG GAAGCCATGC AGTGTGTGGA      180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTTGTGAGA GTGGGAGTGG AGTCCACCCT      240
GGAAAGGAGC CAGATCACCA GGGATCACAT GGGCCAACTA CTCTATCAGC TGGTACAGTC      300
AGAAAACTC AGCAACAGG ACTTTTTCAA AGGTTTTTCA GAAACTTTGG AATTGGCAGA      360
TGACATGGCC ATTGATATTC CCCATATTTG GTTGACCTT GCTGAACTGG TGACCCCAT      420
GTTAAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT      480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAAATATTG CACCTACTAT GCAAACAAAT      540
GAGCCATAAG AAAGTGGGAG CTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTT      600
ACCAGAAGGA GAAGATGTAC ATAATTTTCT TTTGGAGCAG AAGTTGGACT TCATAGAGTC      660
TGACAGTCCC TGTTCTCTG AAGCACTTTC AAAGAAAGAA CTGTCTGCCG AAGAGCTGTA      720
TAAGCGACTC GAG                                                    733

```

## (2) INFORMATION FOR SEQ ID NO:822:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAAATCACTG	TTTGTCTCTGA	GACACAGGTA	AGTTCCTCTG	60
AAACTTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCAGATAAG	GAGGTTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCCCGCT	ATGTGACCAA	TGCTTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATACAGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCAGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGTT	ACCTCTGTAA	ATCCCTGGTC	CCATTTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCTGTCTCC	AGCTTGCAAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGGAAGAGCA	CGTTCGCTCG	AG			512

## (2) INFORMATION FOR SEQ ID NO:823:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAA	60
GATAGAATTG	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGTCAAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCCAGGA	TTCTGTCCCT	GTCCACCTTT	180
AATCTTTTCC	TTTCTGATT	TTATGTTATA	AGTTATTTAG	ATTTGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTAAAGT	TTACAGGTG	GGTGGAACCC	TTGTATATAC	300
TAGATGGTAC	TGTGAGGGCT	TGCCCACTG	TCAGCCTTCA	TCTGAACAGA	GCAGAAAGTG	360
TTTCTGCATG	TTCAACCAAG	CCTGCTGGAC	TGTATCACTT	TTCTCTGTGG	GCCAAAACCT	420
GAG						423

## (2) INFORMATION FOR SEQ ID NO:824:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC	TTCATGGCCT	AGCGGCCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAAATG	GAGAACCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTTT	CAACACCACG	TTTTGGCAAA	ACGTTGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCTTTGGG	AACTGTCAAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	AACAAAACA	GCCAAGCTTT	TCTGCCAAAA	AGATGATCTC	GAG	353

## (2) INFORMATION FOR SEQ ID NO:825:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```
GAATTCGGCC AAAGAGGCCT AGGAGTAAGG ATGCAGAAAT GATTGCAGCA TATTTTCATTC      60
TCTACGCAAG GATGTTCTCT GGAAATGGAG GCGACATTGC TGCCTGCTTT TTTGAGGGAA      120
TTGATGATGT TCACTGGAAG GAAAATGGGA CATTAGTTCA AGTAGCAACT ATATCAGGAA      180
ACATGTTCAA CCAAATGGCA AAGTGGGTGA AACAGGACAA TGAAACAGGA ATTTATTATG      240
AGACATGGAA TGTAAGGCC AGCCAGAAA AGGGGGCAGA GACATGGTTT GATTCCTACG      300
ACTGTCCAA ATTTGTGTTA AGGACCTTTA ACAAGTTGGC TGAATTGGA GCAGAGTTCA      360
AGAACATAGA AACCAACTAT ACAAGAATAT TTCTTTACAG TGGAGAACCT ACTTATCTGG      420
GAAATGAAAC ATCTGTTTTT GGGCCAACAG GAAACAAGAC TCTTGTTTA GCCATAAAAA      480
GATTTTATTA CCCCTTCAAC CTCGAG                                         506
```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```
GATGGAGCAG TTCCAGAAGG AGAAGGAGGA ACTGGACAGG GGCTGCCGCG AGTGCAAGCG      60
CAAGGTGGCC GAGTGCCAGA GGAACTGAA GGAGCTGGAG GTGGCCGAGG GCGGCAAGGC      120
AGAGCTGGAG CGCTGCAGG CCGAGGCACA GCAGCTGCGC AAGGAGGAGC GGAGCTGGGA      180
GCAGAAGCTG GAGGAGATGC GCAAGAAGGA GAAGAGCATG CCCTGGAACG TGGACACGCT      240
CAGCAAAGAC GGCTTCAGCA AGAGCATGGT AAATACCAAG CCCGAGAAGA CGGAGGAGGA      300
CTCAGAGGAG GTGAGGGAGC AGAAACACAA GCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```
GAATTCGGCC AAAGAGGCCT ACAGGTACAG AATCATATGA ATGTTTCTTT CTTTCTTTCT      60
TTTCTTTCTT TCTTTCCTTC TTTCTTCTT TCTTTTGTG AGACAGAGTC TTGTTCTGTT      120
GCCAGACTGG AGTGCACTGA CTCATCTCA GCTCACTGCA ACCTCCACCT CCCAGGTTCA      180
AGCAATTGTC CTCCTCAGC GAGGACCTGC CTCGAG                                         216
```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC	AAAGAGGCCT	AAAAAAAAGA	AGATGGGTTT	TTTAAGTCCA	ATATATGTTA	60
TTTTCTTCTT	TTTTGGAGTC	AAAGTACATT	GCCAATATGA	AACTTATCAG	TGGGATGAAG	120
ACTATGACCA	AGAGCCAGAT	GATGATTACC	AAACAGGATT	CCCATTTTCGT	CAAAATGTAG	180
ACTACGGAGT	TCCTTTTCAT	CAGTATACTT	TAGGCTGTGT	CAGTGAATGC	TTCTGTCCAA	240
CTAACTTTCC	ATCATCAATG	TACTGTGATA	ATCGCAAAC	CAAGACTATC	CCAAATATTC	300
CGATGCACAT	TCAGCAACTC	TACCTTCAGT	TCAATGAAAT	TGAGGCTGTG	ACTGCAAATT	360
CATTCATCAA	TGCAACTCAT	CTCGAG				386

## (2) INFORMATION FOR SEQ ID NO:829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC	AAAGAGGCCT	AGCTGAATCC	TAGATTTTCA	CTTCTCACTC	AGAATTTAAG	60
CTGTTTTTCAG	TACCAGAAAT	ATTTAAGACT	GTTAGTTTAA	CTTCTAAGAA	TAGCAGATAA	120
AGCGTATAGG	TGTTTTGAGA	TAACCGTATT	CATAGGAAAA	ACAAACATAA	AACTTTCATA	180
ATTTTGGGAA	GAGTTACACA	CAAAAATATC	ATCATTGAAT	AATTAGTACA	ACAAAAATGC	240
ATTTGTTTGT	CCTAAAGGTT	GAAATGAACA	GAATCATGAT	GGGAATACTC	GAG	293

## (2) INFORMATION FOR SEQ ID NO:830:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC	AAAGAGGCCT	AATTGAATTC	TAGACCTGCC	TATGTCCTAT	TCCCTGTGTC	60
CTGCAAGACC	CCCTTTGGTT	TGGTTTTCTT	TTCTTTTCTT	TTTTTCTTTT	TTGAGACTGC	120
GTCTTGCTCT	GTCTCCAGG	CTCGAG				146

## (2) INFORMATION FOR SEQ ID NO:831:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GCGATTGAAT	TCTAGACCTG	CCTCTCATCC	ACTATTGTCT	TTCCCCAATT	TTTTTCTAGC	60
CTTATCTTCC	AGAATTCCTC	TCAGACATAG	GTGGCCCTGG	TTGCTTGATC	CTGTCTCTAA	120



GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	TTCATGGCCT	AGCTGATTTA	AATCTAAAAA	CTGGATAAGA	AGCTGTGGCT	60
TGTAATTAAA	AATAGACCTT	TATTCAC TAG	ACCTACAGTT	TGCTTTTTTC	ATATGTTAAG	120
AAAAGTTTAA	TATCCTGCT	CTCTATTTC	GTTCTAGGGG	CACCACTATC	AGTTAACCCT	180
AAAGATTCT	GTGGGTGAAA	CCATTTTGAT	TACCATCTTG	CTCTGCTGCC	AGTTATGGTA	240
ACCAAACCT	CTTTGTTTCT	GGATGCTAAA	TCTGTCCACT	TGTGCCTTAA	CTACATCCTA	300
ACTCCCGTCA	ACTCGAG					317

(2) INFORMATION FOR SEQ ID NO:833:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC	TTCATGGCCT	AGCCCCCGGA	GCCCCACCACA	GTCCCCAGAG	TGTGATAAAA	60
ACAATTTTAA	TACTTCTTAT	CTCTTTCTAG	TAGTCTACAT	CCCATTCCCA	GTCTTTCCAA	120
TCATAAAAAT	TGTTAGTTTA	TTTAGTTCAC	ACTTGAACGT	CCATGAAAC	TGTTTAAAC	180
CTTTTACCTA	TCTTGTCTT	TGTCATTATT	CTTAAGCCAT	TGATACAGAA	ATCAGAACCA	240
AATTTAATAT	TGTTGTGGGT	ATGAGACAGT	TTCTGTCATG	TTTAAATTTT	TTCCTTAAAG	300
TTTACTATG	TACTTCATAT	ATACCGGGCA	CTTCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:834:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC	TCATGGCCTA	TGACTTTTAA	GTTTCTTATT	ACACTGAGAA	ACACCTAACT	60
ATCCTAATAG	AATTAAATTT	CCCTAAGTTA	TAAGACACTT	GAATTTTFTA	AAAAGAGATA	120
ATTAAATTTT	TCCTATATTT	TATTTCAATT	ATTTTTCAG	TCATGCTCCT	TCTGTATCTC	180
CTATATTTTA	TTATATTACT	TACATGGCTT	TATTTTACA	ATAACTCTTT	TTTTCCCTTC	240
TTTTATTTAT	TGTTTATTTT	TGGAACAG	AGTTTCCTTA	TGCTGCCAC	GCTGGTCTCTG	300
AGCTCAAGCA	ATCTTCACGC	CTCAGCCTCC	CAAAATTATA	GGACTACAGG	CATGAGCCAC	360
TGTGCCTGGC	CTAAGCCACT	GCACCCGGCG	CTCGAG			396

## (2) INFORMATION FOR SEQ ID NO:835:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```
GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAAAATC CTACATTGGT    60
CATTGGAATA ATATTGATTC ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT    120
CTACAATATC AGAAACTCAA TTTGTTAATG TTACTACTAG TCTCATCAGA AATGTCCTTA    180
AGTATTGTGT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTTCCAGAA TTTTCATTTT    240
CATTGAAGT  CTGAATTTTA TCAACTATAA ATACTGTCAG TTGTTTCCCT  CGAG    294
```

## (2) INFORMATION FOR SEQ ID NO:836:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```
GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTAT  ACATTGTGTC    60
TGAATGCTGG TTTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT  TATCCTGTCT    120
TTTGTGCTG  CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC  TGTATAACGC    180
TCCACTTCCT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT  CATACGCTAA    240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA  CTGCTTTGCC    300
ACCTACTTCC ACACCCCTA  CACCACCACT GCGACACCCA GCGACACTCG  AG    352
```

## (2) INFORMATION FOR SEQ ID NO:837:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```
GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTCAGAAA  CACATGTGCA    60
AGGGAGCTGT GCCAAGCTCA TGTTCGAAC AGGCCTCCTG ATGAAGCTTC  TCAGCGAGCA    120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACGGAC CAACAAAAAA  CAAATTATAT    180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC  TCATGAAAGA    240
AGTTCCAGGA GATGACTATA AGAACAACT  CATCTTCGCA ATATCTGTGA  CTGTAATACT    300
AATAATTTTG ATTATAATTT TTTGTCTTAT AGAGGTGAAT TCACATATGC  TCGAG    355
```

## (2) INFORMATION FOR SEQ ID NO:838:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```

GAATTCGGCC TTCATGGCCT AAAAAATCTA GTTGAGAAAA AGAAAGAAAC CAAGAAGGCT      60
AATCACAAGG GTTCTGAAAA TAAAACTGAT TTAGATAATT CTATAGGAAT TAAAAAATG      120
AAAACCTCAT GTAAATTAA GATAGATTCA AACATAAGTC CGAAGAAGGA TAGCAAAGAA      180
TTTACACAAA AAAATAAGAA AGAGAAAAAA AACATTGTTT AACATACTAC AGACTCTTCT      240
CTCGAAGAAA AACAAAGGAC ATTAGACTCA GGCACCTCTG AAATTGTGAA ATCTCCAGA      300
ATCGAGTGTT CTAAGACAAG AAGAGAAATG CAATCAGTGG TTCAACTCAT AATGACAAGA      360
GACAGTGATG GTTATGAAAA CTCAACAGAT GGTGAAATGT GTGACAAAGA TGCTCTGGAG      420
GAAGATTCAG AAAGCGTTAG TGAATAGGA AGTGATGAGG AATCTGAAAA TGAATTACA      480
AGTGTGGTA GAGCTTCAGG TGATGACGAT GGAAGTGAAG ATGATGAAGA GAAGCTCGAG      540

```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```

GAATTCGGCC TTCATGGCCT AGCATTTCAT CTCTAAATTG GGGAGAATAG AAGCATCTAC      60
TTCATGTAGT AGCCAGGATT AGAAGAGGGA GGAATAACTG GGCCCTGGAT AGAATGTGAT      120
GAATGTATAT TCTTAATGAG AAGTGGAAAT AATTTGTGGT TGAGAGCTGT GCCTCAGATC      180
AGAGTGACAG GATACATGGC TAGGCTATAT TTTCCAGCAG ATTAAGAGCT GCAGCCCAAG      240
ACTCTGAAAT ATGAAGAAAA AAGGAGAAGA TGACAGCATA TCTTTTAAA GAAATATTTT      300
CCAGCCAAAT GGTGCAGCAG AGGACTTCCA GGAATTGTGT CTTGTTCTGT ATCAAAGGTG      360
AAGAGTTTCGT AGCCTTCAAG GAAACAAGAA ACCATGGGAT GGAGTGAAGG AAGGTGGCCT      420
GGAACCAGCT GCTGAGCCTC TCTGAGCCCC AGTTTCCTCG TCTCTAAAAT GGGGCTGATC      480
TCCTCTCCCT CAGACTGTTG TTGCAGGAAT TAAACAGGT GTTGAGTGGG CTGCTCGAG      539

```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```

TTCCACAGCT CTGATATTCA GTAACCCATG TGGAGAACAA AAGGATTTTG CTCCATGAAG      60
TCTAATTGCC TGCTGAATAA ATAAATAAAT AGATGAAGCA CTGCATGCAT TAAATGAAAG      120
TAAATATTGA CCCTGCCACC ATATGTTTGC TGGGGTGCTG GCTGAAGTGT GCTGGCAGGT      180
CCAATCAGTC AGAGTCTGCC AGCCCAGCAA GCAGGAGAGA CAGGAATATC AAAAAGGCGC      240
TCCTGCTTGT GCCTTAATCT TTGTCCAACC CCCAATTCCT CCACCACAGG CCTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:841:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGGTTCTT ATCCCAGTCA GCTGGCCAAA ACATTAACCT TGGATTTCTT      120
ACCCTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TTGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTTGCA TCATGCTGCG      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:842:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTCTGTG TGATCGTAAA      60
AGTGCAGAGT TTATTGCAAA GAGAATCTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTCCCCATC      180
CGCACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:843:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCGGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTCACGTTT CTCCCAGGAC ACCAGAAGCT      180
GAGTGCCCGG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTCGAA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCCATGT GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTTGTTCTCT ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGGAGAGG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACACTGAAC GCTCGAG

627

## (2) INFORMATION FOR SEQ ID NO:844:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

GAATTCGGCC TTCATGGCCT ACCTGAGCTG CCGAAGCCGC CGTCCTGCTC TCCCGCGTGG	60
GCTTCTCTAA TTCCATGTGT TTTTITAGAT TCTCTCGGGC CTAGCCGTCC TTGGAACCCG	120
ATATTCGGGC TGGGCGGTTC CGCGGCCTGG GCCTAGGGGC TTAACAGTAG CAACAGAAGC	180
GGCGGCGGCG GCAGCAGCAG CAGCAGCAAT CTCTTCCCGA ACACGAGCAC CACAGGCGCC	240
CGAAGGCCGG AACAGGCGTT TAGAGAAAAT GGCAGACGAT ATTGATATTG AAGCTCTAGC	300
TCGAG	305

## (2) INFORMATION FOR SEQ ID NO:845:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

GAATTCGGCC TTCATGGCCT ACCAGAAAAA ACTTACATTG AAGAGAGGAT TCCTTGTTTT	60
GACTATGTGT GTTTCGCGG TCTTAGGCAG CCAACGTATT GGTTTACATG GATCTGGAGG	120
ATTATGCACA CTAGTGTTGA GTTTCATTGC AGGGACAAAA TGGTCCCAAG AAAAGATGAA	180
AGTCCAAAAG ATTATTACGA CTGTATGGGA TATTTTCAA CCACTTCTTT TTGGTTTAGT	240
TGGAGCAGAA GTATCTGTTT CATCGCTTGA ATCAAATATT GTGGCATAT CTGTTGCCAC	300
TCTAAGTTTG GCATTATGTG TTCGAATTTT AACCACATAT CTATTGATGT GCTTTGCTGG	360
TTTTAGTTTT AAGGAGAAAA TATTTATTGC TTTAGCATGC ATGCTCGAG	409

## (2) INFORMATION FOR SEQ ID NO:846:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

GAATTCGGCC TTCATGGCCT AGGCACGGTA CATACGATTA TTATAAACAT CAGCTGCGGT	60
TCTGGGAGTG AGCTTGTCGTC GTGTTAGTGC CATCTCCCTG ACAAACTGA CCTGTACCCA	120
CATCTCAGGC TGGGAAGGAG TAGCTGGGCC TCCCTTTAAT GCAGCGGCAC TGGTTTGGGT	180
CACAAGAGCT GGTTTGATCA ACCCCTGACT CCCCCTGGCG GGAGGTGCTC GTCACATCTG	240
GGAGCCTGAG CAGAGGTGCC GGGGGCTTGG AAGCTGGAGA AATGATGGAT CTTTCTCCAG	300
GAGAAACAAT TCTTATCTTC ACATCNGCCC CGTGCTCAA ATGAAGAGCG CGTTTGATA	360

GCTGCTCGAG

370

## (2) INFORMATION FOR SEQ ID NO:847:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GAATTCGGCC TTCATGGCCT ACGCGCGGCC GAGCGGAGGC GGAGTCGGCG CCGAGAACAT      60
GGCTGGAGGC AAAGCTGGAA AGGACAGTGG GAAGGCCAAG GCTAAGGCAG TATCTCGCTC      120
ACAGAGAGCT GGGCTACAGT TTCCTGTGGG CCGCATCCAC AGACACTTGA AGACTCGCAC      180
CACAAAGCCAT GGAAGGGTGG GTGCCACTGC TGCCGTGTAC AGTGCTGCGA TTCTGGAGTA      240
CCTCACTGCA GAGGTGCTGG AGCTGGCAGG TAATGCTTCT AAGGATCTCA AAGTAAAGCG      300
TATCACTCCG CGTCACTTGC AGCTTGCAAT CCGTGGTGAT GAAGAGTTGG ATTCTCTTAT      360
CAAGGCTACC ATAGCTGGGG GTGGTGTGAT CCCTCACATC CACAAATCTC TGATTGGAAA      420
GAAGGGACAG CAGAAACTG CTTAGAGGGA TGCTTTAACC AACCTCTTCC TTCCCCGTCA      480
TTGTACTGTA ACTGGGACCT CGAG                                         504

```

## (2) INFORMATION FOR SEQ ID NO:848:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AAACAAGCAG AGGGACTCCC CAGATAGCTT CATACCAGT      60
TTAGCTTTAT AACAGTGTA GTTTTAGGCT CTGTCTTGGC ATACTTGAGA GCACAATGGC      120
TGCTTCAAAA CAGGCATTTG AACTCGCTGT TTAATCAAAT TCTTCTTTAA TCTAAAGTGA      180
GTTTTCATA GAGAGCATAT ACACTTAACC CTTGAACAAT GTAGGGGTTG GGGTGGGGAG      240
TCAACCCCT GTGAAGTAA AATTGCTAA TAACCTTTGA CTCCCCAGA ACTTAACTAT      300
AAATAGCCTA CTATTGATTG GAAGTGTTAC CAACAGCATA CACAGTTAAC ATATATTTG      360
TATGTAATAT GTGTTATCCA CTATATTCTT ACAATAAAGT TAGCAAAAGA AAAAAATGTT      420
ATTAGGAATC CTCGAG                                         436

```

## (2) INFORMATION FOR SEQ ID NO:849:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGGCC TTCATGGCCT ACATGAGCCC AGGAGTTGAA GGCTATAGCC TGGGTGACAC      60
AACAAGGCC CATCTCTAAA AAATATATAA ATAAATAAAG TTAAGGATGC TCGTGGTTT      120

```

```

ATATGTTTCTAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC 180
TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCAGCC GGAAGTAGGT 240
TTTTTGAAGA GTCAGCTGAA AACAACTGTT GCCGTATTTC GAATTTAAAA TTTTAATTG 300
AAAATATTAT AACTGAGAAA TTATTGTATA TATTTATGGT ATACAGCGTG ATGTTATGAT 360
ACATGTATAC AATGCAGAAT GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA 420
CTATTTTTGT GGTGAGAAAT TTGAAATTTA TTATCTCAGG AATTTTGAAA TGTACAATAC 480
ATTATTATTA ACTGTTCTCG AG 502

```

## (2) INFORMATION FOR SEQ ID NO:850:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA 60
CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAAA 120
GAATTTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG 180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA 240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAACTCGA G 291

```

## (2) INFORMATION FOR SEQ ID NO:851:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GGTTCTGTAT TCTGTTGGTT GGAGTGTCT ACTATTGTTG GGTGGAGTGT TCTATCTTCT 60
GTTGGGTGGA GTGTTCTGCT GTTGTGGGT GCGGTGTTGT ATATTCTGTT GTTGGGTGGC 120
GTGTTGTATA TTCTGTTGTT GGTGGCGTG TTCTATCTTC TGTTGTGGG TGGATGGATT 180
GTTCTGTATT CTGTTGGTG GCATGTTCTA TCTTCTGTTT TTGGGTGGAG CGTTCTATCT 240
TCTGTTGGGT GCGCATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG 300
GGTGGCTCGA G 311

```

## (2) INFORMATION FOR SEQ ID NO:852:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 532 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC CTTATGGCC TAGTCTCATC TCAGAGTACT CAGAGAACT ATTTTAAAT 60
CTCTAGATAT CAATCAATGA ATATTTATTA TAAATACCT GCTATGTGCC AGATGGTGT 120

```

AATTATAAGT	TTGTTCTCTT	TTTGTCTGTC	TACTTAGGCT	TTTATCATT	TGTCCTATCA	180
TTAGGGAAGT	GGCTCCNNNN	CTTACAGCTA	ATTTTTTTTT	CAATTTACTA	ATGACTTTTT	240
GTGGAGGTGG	GGATCTCTTC	TGTCAACAT	TTTCTATGAT	TCATCTCAAT	CCTCCAGTGA	300
TTATTAAAAA	ACAGTTGCAG	TAAGTTCAGT	CATAGGGGCA	CTGGAATGAG	TCCTTAAAC	360
TTTATGCTGC	TGCTTTTGCA	ATGATGGATT	GCCTGAGAAT	TAAGGAAAGA	TAACTACTCT	420
CTTGGTCACT	GTATTTCCAA	TCAACCATAT	CCTCCCAGAA	TATGATTTC	TCCCTCAGGC	480
ATTTTAGAAA	AGAGACAAGA	GACAGATTTT	TTTTTTCAGG	CAATGACTCG	AG	532

## (2) INFORMATION FOR SEQ ID NO:853:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

GAATTCGGCC	TTCATGGCCT	ACTTTTGTAT	AAGCAACTAG	TGGTCTCATT	ATCAGAGGTC	60
CCTGAGGGGC	CCTACAGGCC	CCCCCAGGTT	CTGCCCCCAA	GATTCTAAGA	GAGACCTTGT	120
GCTAGGGCTC	TAGTCTTGAT	GTCTTTTGCA	TTGTTTGGAT	ATGAAGCCCA	GGATATGTGG	180
GCACAATAAG	GTAAATCATG	AGATGTGAAG	GAGAATGAAG	ATCAGGCCAG	AGGTCACCAT	240
TCATTGAAGA	GCCAGAGAAA	AAGAAAATTA	GTGCACAGAT	TTGTGTAGAT	TTACAGAGAA	300
CTTCTATTTG	CTGCAAGAAC	TTCATCAGGC	GCTGCACCAT	GCCTGATTTG	GAAAGGAGCT	360
TCTTTGGGGC	CTGATAGAAC	TGAATTAATA	TGAAGAAATT	GAAGTGGCTC	TCGAG	415

## (2) INFORMATION FOR SEQ ID NO:854:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

GAATTCGGCC	TTCATGGCCT	AGTAAAATTA	GCTGAAAAAT	AATTTTCCAA	TGCAAATACT	60
AATGAGGGTT	ATATGACCGT	TGTCCAAAGC	ATTTGCAGTG	CTGCATGACA	TTTGTCTCTAA	120
AACCTGACTC	TTAAACATT	CCTTGTGAAA	ATAGAAATAT	TCCCATGCCT	AGATTCCAAA	180
TAATAAAAGA	CACTGAGAGT	GTTTTCAAAA	TTAATGGACT	GATTTAAATT	TCACTGGAAA	240
GCAGCTTTTT	AAAATAAAT	TGCTGGATG	TGGCCTCCCT	GTGATCACTT	CCAACGCTT	300
ACTGCCAACT	TCTGGCGGCT	CGAG				324

## (2) INFORMATION FOR SEQ ID NO:855:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:



```

GAATTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC      300
AGCCTGGGCA TGTCCTCCAG GCCAGCAGCC ATTCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGGTCCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAAT CTCTTGAAAC TTCTTCCTTT CGTATTCAAC TGACTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCTCT GAAAAGGGGC ACTATTTCTT TAATGTCCTT TAGTTTCTTA      600
ACTTCCTCAT CTCGAG                                     616

```

## (2) INFORMATION FOR SEQ ID NO:856:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAAATC AGTATTTGTA CACTGGAATG ATAAAAAGAT      120
GTTCCACTTT CTTTTCAGCC AGAAAGCTTC CTCGTTGTGT GTGTGCGTGT GTGTCCCATC      180
CTATTGCGTG TTCTTTCTAA ATCTACATT TGTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCACCA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAACA AACCTGTGA CCATTCCACC TCCTTGATC TGTTGGCTTG      360
GTTTGAAAC TGACCAGCAA GCTGGAGCTG CCACCACAGA GAAACATCAA AGCAAAAGGG      420
TTCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG                                     497

```

## (2) INFORMATION FOR SEQ ID NO:857:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTCAATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCAG TGGTGCGATC TCGCTCATTG CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCAGCT ACTTTTGTG TTTTGTAGTAG AGATGGGGTT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CCTGACCTCG AG                                     262

```

## (2) INFORMATION FOR SEQ ID NO:858:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA      60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC      120
TTTGTTGCAG CCAGTTTAAG TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAAGTGGG      180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCACTAACT CAGCACAACA GGGCCATAAC      240
AGTCCTGACA GCCCCGTCAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC      300
AACATCAGTG GTGCCCTGT GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA      360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGGCAGCA ACGGGAAAAG AGAGAGATAT      420
ACTGAGAACC GGGAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA      60
AATTGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGCTACT CCCACCTCCA      120
CCTTGCGGAT CTCAGAGCTG CAGGATGGCT CTGCCCACCG CACCCTGAGC TGGCCCCGCT      180
TGGGGCTGGC ATTGGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCCCT      240
GTGCCTCTGC TGGCCGCCCA CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAATCC      300
CTGCGCGCAC CCTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC      360
ATGGGCACCT CTGCTCTTCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```

GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC      60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACTT GCTCGACTGA GAGACTCAGG      120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA      180
GAAGCTATTG GAAAGAGAGA GGCAAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA      240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AACGGCAAG      300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGAAGAACA GCAGAGGAAA GAGAGAGAAG      360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTGCAG AAGGGCTCGA      420
G

```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```

GGATTTCTTT GGAATGGGCA AAGAAGTGGG GAATCTGCTA CTGGAAAACT CACAGCTTCT      60
GGAAACCAAA AACGCCTTGA ATGTGGTGAA GAATGACCTG ATTGCCAAGG TCGACCAGCT      120
GTCCGGGGAG CAGGAGGTGC TGAGGGGCGA GTTGGAGGCT GCTAAGCAGG CCAAAGTCAA      180
GCTGGA AAC CGTATCAAGG AGCTGGAAGA GGAAGTAAA AGAGTGAAGT CCGAGGCCAT      240
CATCGCCCGC CGTGAACCCA AAGTTCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```

GCGGCTCTTT GGGAGGTGGT CAGGGGAAAA GATGGTCAGT GCTTTTCTG GACAAATCCA      60
GGGGCCAATT GAGGTGGGGA GTCTATGAGA AGGGCCCTGT CAGCTGAGGC GAGGGAAAGG      120
GCAGAGGACC TAGAATAAAA GGATATGGCC TCTCTGTGCA CTAGCAGGAT GGGTAGGAAA      180
GGGAGATATG AAAAGACGAA ATGGGGACCG GGTGCGGTGG CTCACGCCTG CAATCCCAGC      240
ACTCTGGGAG GCCAAGGCAG GCAGATCACC CGAAGTCAGG AGCTCGAG                    288

```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```

GCTCGAGTGG AATGGGCCGA GGAGATGGAT TTGATTCTCG TGGCAAACGT GAATTTGATA      60
GGCATAGTGG AAGTGATAGA TCTTCTTTT CACATTACAG TGGCCTGAAG CACGAGGACA      120
AACGTGGAGG TAGCGGATCT CACAACTGGG GAACTGTCAA AGACGAATTA ACAGAGTCCC      180
CCAAATACAT TCAGAAACAA ATATCTTATA ATTACAGTGA CTTGGATCAA TCAAATGTGA      240
CTGAGGAAAC ACCTGAAGGT GAAGAACATC ATCCAGTGGC AGACACTGAA AATAAGGAGA      300
ATGAAGTTGA AGAGGCTCTT CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 546 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT    60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG    120
AGCTGGATGT GAGAGTCTCC TGAGGACCCT CGGTATACTC AGAGCATTTC CTCTCAGGGT    180
GCAGGAAGAG GAAAGCAGAG GAAAGTGGACT TGAAGGACCA AAGGTGGGAT CCTAGCTGGG    240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTC CCTTCTCTGA GCCTCAGTTT    300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT    360
TAAATGAGTT ATGCCATGGA AGTGCTGTAC ATTACCCATT GATAATGTCT CAGTGGGCCTC    420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT    480
GCTGGGACTA GAACCCGGGC AACCTCGCAG TGCCATGCCC TACTGCATCA CTACGTCCAC    540
CTCGAG                                         546

```

## (2) INFORMATION FOR SEQ ID NO:865:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTTAATTTAT CACAGTCTGT    60
ATTAAGTAAT ACTAAACCAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT    120
GCTATCTTGG TCTTTGTACT TTTGTTTTTG TACATTTTAC TTTGGCATAA ATGTCAAAGT    180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTGCGCTCTC TCCTTAATGT AAAAAGGCTT    240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC    300
ACACTGTTCT GTACTGTCCC TTATTTATTT TTTTTTTTTT TTTTTTTTGG AGACGAGCTC    360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTCGGC TCACTGCAAA CTCTGCTTCC    420
CGGGTTCACG CCATTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGCGCCCGCC    480
ACCACGCCCC GCTAATTTTT TGTATTTTGA GTAGAGATGG GGTTTCTCCG TGTTAGCCAG    540
GATGGTCTTG ATCTCCTGAC CTCGTGATCC GCCCACCTCG GCCTCCCAAA GTGCTGGGAT    600
TACAGGCGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTTAAAGCAG TTCTCTTTTA    660
AAAAATTGTG GTAAGATATA AATCACATAA AATTGTCAGT TATAACCAT TTAAGTATA    720
TAATTCCATG GCATTAATTA CAGTCACAGT CTTTACAAC TATATTACT ATGTATTCTT    780
AAAGTTTTTT TACCCTCCCC CCCTCGAG                                         808

```

## (2) INFORMATION FOR SEQ ID NO:866:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAAATGAAA    60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTTAAAAAAA ATGCCTCAAT TTGGCAATCT    120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTTCTAATG AAAATCTTTA    180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCAC    240
CTCTAATATG CATATAATTT TTTCCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA    300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA    360
G                                         361

```

## (2) INFORMATION FOR SEQ ID NO:867:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA    60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA    120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG    180
TATGTATTTG AGGAAGTGT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT    240
GTGCCTGCTA TGTTACTTCT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG    300
GAGAAGTTTC ACAGCTTTT TTCAATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG    360
TGGTGGCTTA CGCCGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG    420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAACT CCGTCTCTAC TAAAAATACA    480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCAG CTCCCGCCGG GCGACTCGAC    540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATTAT    600
TTANTTNTTC TGTTTCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTGAGTGTA    660
GGCCTGGAGA TTTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC    720
CAAGATCTAG TGTTTGTAC TAGGAGAACT CTAAAAAGTA TCTATTTCAC TGTAGTGCCA    780
AAGTACAAAT TTATTGGAT TTATTTTTC CCATCTTATT TTTTAATATA TTTCTTTTTC    840
TATGTTGTGC TTCTTCCCA CCTCATCTCT CCTCCTCGAG    880

```

## (2) INFORMATION FOR SEQ ID NO:868:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGAATCACTT    60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT    120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT    180
CTTCTCTCTT GGGGGTAAG ACACTTGTTG TTGAGCTCTG GGGATGATGG AGAACGACTC    240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTCTGGGG AAGAATCACA TTCGCTTCTC    300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCAGGAG AGGACCCAGA CAGGCTGTGC    360
CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:869:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TTCATGCCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	GCGGCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCGCCAAC	TGGAAGACAT	300
ACTGAGCACA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GGCGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAG	ATGCAGAGAA	GTCCCAGACC	TATGTGGCAA	GGAATGGGGA	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

## (2) INFORMATION FOR SEQ ID NO:870:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 372 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AATTTGAGCT	TCAAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGCTGTGGT	GCTCCAAGGT	GTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGGAAGAGT	GTTCGAGCTT	CTTCCCTTTT	CTCTTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCCAGA	TAATTCATCC	TGGAGTACT	AATTCATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTTC	TAAATCTACT	GGGCAGTTGG	AGACATTGTC	TTTTGTTCCT	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGTCTATGT	TTTTAGTGTG	TTTTAAGGAA	360
ACTAGTCTCG	AG					372

## (2) INFORMATION FOR SEQ ID NO:871:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 574 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGGG	TGCCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGCAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CCTGGGTGAC	AAGAGTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAATT	180
ATGTACACAA	ATATGGACAG	CACTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTTCTCTT	240
GTTTTGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTTAG	AATCCTCCTT	300
CTGAAAGGCG	TCCTGTGCAC	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCCAC	TAGGATCGCC	AGGCCCTACT	GAGGCTCAAG	CTCCTTTGCT	480
GTTTGGAATC	TTCCCTCCCC	AGCCCCCAG	CCTCATCAAA	GGCTGCCTTT	TCCTGTTTAC	540
TGACCACAGC	TGCTTTGACT	CCATTAGCCT	CGAG			574

## (2) INFORMATION FOR SEQ ID NO:872:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 528 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCGAC	60
TCCAGCATCC	AGTGTACCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCCAAGGCC	AACGAAATCT	TGGCCTCGGT	CAAGGCGACC	ACCCTTGGTG	TATCCAGTGA	180
CTCACCGGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGCG	240
TAGAGGAGGC	GGCTCAGGCA	ACCCTACTAC	CACCATCGAG	AGCCCCAAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACA	CCACAAGCAG	360
CCAGAATGGA	GCAGAAGATA	CAACAAATTC	TGGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTCACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCTACAA	GTCCACTTAG	480
CCCCCGACAA	CCCCTTCGA	CGCATCCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCCTGCCA	60
GGGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTTATAG	TGAAAGATTG	AAATTTGCTT	TTCAAGAAAA	ATGCCAAAAG	CTATTTAAAT	180
AAITCGAGGT	TACATCGTAG	GTTTTGATT	TTCTCAATTT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTTCCT	AAAGTTTCTT	CAAGTATTTT	TTAAGGTGGA	GAAATGCAGG	300
AATTGTATAA	CCAGAATTGT	TTCTGCCCTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTAA	CAAGTATCTA	ACTATCAAAT	TGTGTTTAGT	480
AACTTGAGTG	TATGCACAAG	TTTGATCAAC	AGCAAAATAG	AGTTCTGAAT	TTCTTTTAAA	540
GTGATGATAT	ATTATTTTGT	GAACTTTGT	GTTTGAAAAT	GTTTATTCT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TCGTCTTATT	TTATTTTCTT	TTCTCTCTCT	TCCTTTCCTT	TTTTTAAAAA	120
ATTTTACCCT	GCCCCCTCTT	TTCCGTTTGT	TTTTATTCTT	TCATTTTAC	AAGGGACGTT	180
ATATAAGAA	CTGAACCTCA	CATTCAGGTT	GTTTTTTTTT	TTGTTTCTAA	GTTTTTGCCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```
GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGCCCAAGAA      60
AAGGCGGTCG TGTTATCGCT CCCAGGAAGG CGCGCGTCGT GCAGCAGCAA AAGCTCAAGA      120
AGAAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA      180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG      240
CCGCCACCTC CTCCAAGACA CCTTCTGAG GACGCTGGCC CCAGTGCAGG CCAACATCCC      300
ACCCCTTACC TCCATATGGG ACCTTGCAAG TCATCCCACT TCCTCGAG      348
```

(2) INFORMATION FOR SEQ ID NO:876:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```
GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC      60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA      120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAAATACA AAATTAGCCA GGCATGGTGG      180
CGGGCGCCTG TAATCCGAGC TACTTGGGAG GCCCAAGCAG GAGAATCGCT TGGACTCGGG      240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCACTGCACT CCAGCCTGGC AGACAGAGCA      300
AGACTCCCTC TCCAAAAAAG TTAAAAAAAA AAAAGAAAAA AAAGGCCGGG TGCACTGGTT      360
CGGCCTCCCA AAGTGCGGGG ATTACAGGCG TGAGCCACCA TGCCCGGCCA CTTTCTGTAT      420
TTTTTAATAA ATAAGAAATA CACATTAGT AGTAGTTACA AAGATCTGTA GGCCGTAGCA      480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATTGTTGGG TAGTATTTAA ATAACAAAAT      540
GTTCAAATAT TTGACAAGAT TAACAACACT ACACGGCCTT CTCGAG      586
```

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```
GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA      60
TTTTAAAAAT TTATGTATTT TCTAGCATTT GCCTCAAGGA TTGAAATTTT TTTTCTTACT      120
TGTGTTTACA GGTAGAATTC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTTGATA      180
TTCTTCAGAC TGAATATTA TTCTCTAGTG TAGAAGAAAA CATTCTCTGC TTACAAAACA      240
AATAGTAAAT ACTCTAAAT AGGGGTTGGC AAACCTTTCT TAAATAAAAG GCCAGATGGT      300
AACTATTTTA GGTTTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTTG TGGGCTACGT      360
ATGGGGTCAC TCTCCCATTC TCTCTCTCTC TCTCTCTCTC TCTCTCTCTC TCTCTCTTTT      420
```



TGTGTGTGTG AGCGGCGCTC TCGAG

445

## (2) INFORMATION FOR SEQ ID NO:878:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAATTCGGCC AAAGAGCCGG AATTTGGCCC TCGAAGCCAA GAATTCGGCA CGAGGGGGTC      60
TCCATTCCCC GAGAAGCCAG GGGCAGGGTG GGATGGGGAA GACCAGGAGC AGAGTCGAGC      120
CTCACAGAAG CCAGCGCGGG TCTCTGCTCA GCACCCAGC CGGGGCTCTG GACCCAGGGT      180
AACAGCCCCA GTTCATCCCA ACCCTCTCA GAGCCTCAAG AGGGGTAGCT CGGCTGCCGG      240
AAGAGAGGGG TGCCCTATCC CTGGCAACCC CTCCACGTAG CGTACCCAG CACCTGCCAC      300
CGCCTTTGCC ATTTCTTTGA GCTTGAAGTT AACTCTCTTA GAGTCTAACT TTGGTTCATT      360
TCTGCACAGG TACAATAGAT GACTTTATTT GTTTAAATG TTTAATATAT ATACATACAT      420
ATATATATAT TTGTCTGTAA GAATTATGTT TTAACAGCT GCTGTAGAGT ACCTTTTTTT      480
AAGTAAATCT TACAGTGGAG TATATTTT AAAGCACAAA ATTGGTGCCA AGACTGGGTG      540
AGAAATGTAC ATTACCCCT TATTATTTG CGTCGGATTC CTCGAG      586

```

## (2) INFORMATION FOR SEQ ID NO:879:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC AAAGAGCCGG AATTTGGCCC TCGAAGCCAA GAATTCGGCA CGAGGGGAAA      60
ATCTTGTCCT AAAAATATAT GAGTTTGGGG GTAAGGGGTG GGATAGCCAA GCAAAATCAG      120
TAATATTTT AAAATGAACA TATGAATTT TATTAACTTT TAGTTAAATA CAGATTTTAC      180
AACGAGGTCA GCATAAGCCT AAATCTATAT AGAGGGCTAA CTCAGGCATT GTCTTGTTTA      240
TTTGTAGACT GGATTAAAA CAACCTGTCC TGTTTGTCA GTTCCAGCT TCTTCGTTTA      300
GAATAAATTA GACCAAAAGA AGAAACGTGC TTGTCTCTGT ATACCCGCAG AATGAAGTTA      360
CTGTTGTAA AACCGATT TTTATTTTA CTAGGTTCCG CTCTCTCCCT CGAG      414

```

## (2) INFORMATION FOR SEQ ID NO:880:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC TCGAAGCCAA GAATTCGGCA CGAGGGTAAT      60
TTTAAAAATT TATGATTTT CTAGCATTTG CCTCAAGGAT TGAAATTTT TTTTACTT      120

```

```

GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTGATAT      180
TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA      240
ATAGTAAATA CTCTAAAATA GGGGTTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA      300
ACTATTTTAG GTTTTGTGGG CCATGTGTTG ATAACATTTT TAGGTTTGT GGGCTACGTA      360
TGGTGTCAAT CTCCTATTCT CTCTCTATCA CCTACCCTCG AG                          402

```

## (2) INFORMATION FOR SEQ ID NO:881:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC      60
GTTTTTTTTT TTTTTTTTTT TTTTTCNNG NNAGGCTTTC CCTAGGTGAT TTTTAATTGC      120
TATTATAAAT AAATATCCAT TTTTCCATA AAATATTGCT ATATGTTAGT ATATTAATCT      180
TGTACTGTTA CCTTTTCAA CTCTATTGGT TCTGATAGCT TGTCAGTTGT CTACCTTTCA      240
TCTTCTAGGT AAATATTCT TACAAATAAT GAGATTGCT CCTACTTTC AATTATCTC      300
ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG              352

```

## (2) INFORMATION FOR SEQ ID NO:882:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTTATAT TCCACAATTT GTTCAAATAC      60
TGGTTTTCTT ATAAACTTTC TACAGGATGT TTTTAAACAA ATTCTTCACA TTGTGTTTTG      120
ACTATGTA CTGCGGAATTT CAGGGAAATA GTTCTGTGTA TTTTAAATAG CTTAATTTGT      180
ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTTAGT      240
GAGTTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT      300
GACTGTAGAT TTGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G              351

```

## (2) INFORMATION FOR SEQ ID NO:883:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 548 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAG GGAAGCCAGA      60
GAAAAGGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGGCC GCCGTTTCATC      120
CAATGCTGC TGTATTTATG AGAAACTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA      180

```

TGAGGAGGAA	GAAGAGGGCT	GTGGCATACA	CACTGTGTAC	GTGGCCACCG	CAAAGGACGG	240
GTTNTGCAAC	CCTAGGACCG	ACCCCCACCA	CCCTTCCCA	GCTCCTGACC	NTTCCCAGCC	300
CCCTCCAGGG	CCAATGCAGC	ACTAAATCCC	TCTCTCTCC	AGCATTCTCG	TGTCTGTCTG	360
GCCCTAAATG	TATCCATGTG	GCTACTTCTC	CAGCCCCCTC	CTTCCCTNTC	TTCTGCCTGA	420
TAGAGGGAAG	AGGAAGAGGA	GGACGAACAG	AGATCCTGAA	ATTCTGACTT	GCTGCTATTC	480
CAGAACCCAG	CCTCCTGGGT	TTCCCCAGTC	CTCATTTTTC	CTCCCAATAC	CCACCCTTCT	540
CTCTCGAG						548

## (2) INFORMATION FOR SEQ ID NO:884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCGGCC	TTCATGGCCT	AAAAAATACA	AAAAATTAGC	CGGGCGTGTT	GGCGGGCGGCC	60
TGTAGTCCCA	GCTACTTGGG	AGGCTGAGGC	AGGAGAATGG	CATGAACCTG	GGAGGCGGAG	120
CTTGCACTGA	GCCGAGATCG	CGCCACTGCA	CTCCAACCTG	GGAGACACAG	CGAGACTCCG	180
TCTCCNAAAA	AAAAAAGAAA	AAAAAACAC	ACTGTCTTA	CAAAGACTAA	CAAAAGATAC	240
AAAATAAAAT	AACTTTACAG	CATCATTAGA	AAGCGAACAA	AATCCTAAGA	TAGATACATT	300
TATCTTTCTT	GTTTTAGAAC	TTTTTCTGTG	TAATGGAATG	GAAATGCTTA	ATCTTGTTTC	360
AATGTTTTCA	GTGTTTGTGC	TTTGTCAAAT	TGAGGTTGGA	TGTTAAAGCC	CTTACTACTG	420
TATTATACAA	AGCAGCGAAC	CTCGAG				446

## (2) INFORMATION FOR SEQ ID NO:885:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCGGCC	TTCATGGCCT	AGCCGGCGCC	GCCGNGTCTT	CCCGGTCTCC	TTTCCCGGCC	60
GCACAGGGTT	TTATAGGATC	ACATTGACAA	AAGTACCATG	GAGTTTTATG	AGTCAGCATA	120
TTTTATTGTT	CTTATTCCTT	CAATAGTTAT	TACAGTAATT	TTCTCTTCT	TCTGGCTTTT	180
CATGAAAGAA	ACATTATATG	ATGAAGTTCT	TGCAAAACAG	AAAAGAGAAC	AAAAGCTTAT	240
TCCTACCAAA	ACAGATAAAA	AGAAAGCAGA	AAAGAAAAAG	AATAAAAAGA	AAGAAATCCA	300
GAATGGAAAC	CTCCATGAAT	CCGACTCTGA	GAGTGACCT	CGAG		344

## (2) INFORMATION FOR SEQ ID NO:886:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

```

GAATTCGGCC TTCATGGCCT AAAAATCTAA ATTAAGTAT GAATAATTTA AAACAGAATT    60
TCAACATTGA GACAATGTAG AGATATATTA TGGTATAAAA TGAAGCATTT GCACGAACCT    120
TTTAGCTAAA ATTTGTTTCA AAGAAGTTGC TTTTGTTTT AGTGTTACCTT GAGTTCAACA    180
CAGATGTGAA TGCCCGCTTT TTCCAGAAGG GTTCTTGGGA GAAAACACTG GAGAAGTTCT    240
AAGCACTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTAGA GATGGTTTCT TACTCTGTTG    300
TTCAGGCTGG AGTGCAAGT TGCAATCATA GCTCACTGCA GCCTTGACCT CCTGGCCTCA    360
AGTGATACCC CTGTCTCAGC CTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:887:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```

GCCCCAGTCT AAGGCATTTA AAATTAAACA GCTCTTCAAC GCCCCAAGTT ATTTTCATCAG    60
GCTAAGAACT TCTCCGAGAA ACGCACAAGA AGGCAGGCAA ACAGGTGGGT AGGTGAGAGG    120
TCACGGGGCT CCATCTGCAA GCTCCATCTA CAAGGCATCA ATCTGCGTTG TGGCATCAAC    180
GTTAAAATGT TCTACAGCTT AGGGATCTTC TTGAAGCAAG GTTCCAAGCA CAAACTAGT    240
ATGACCGGAG GCTCAATTGA GAAGATGCAG CATCTGAAAA CCTTTACCCC AGGAAAGGAG    300
GGGTGCCTGC TGGCATTTCAT GGGCTCTGGA ACAAGCATTT ATTCAAAGCT GATGGCCCCCT    364
CGAG

```

## (2) INFORMATION FOR SEQ ID NO:888:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 416 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```

GCACCCCCAA ATGCCAGCCT CTCCTTTCTT CCCATCCACC AGTATACTGC GGGGCCATT    60
CTGGTCTTTG TCCAACAGGA AACCCATTTC TGGTGGGATA TGCCTTCCAG TGCCACAGGG    120
CCACTCACCC CATGCATCTC TGTCTGCCC GTCAGTGCTG GGACGGACAG CAAGGGCAAG    180
CCAGTGTCTT GCGGATAGG TGGGTGGGAA CAGAGAGGGG AGAATGCCGT CCTAAGCTTC    240
TGCTTGGGGA TCCCCACAC GACCTGGGTA CTGCTGGGGA AACCTGTCCT AAGTAAACT    300
ATGGACCTCG CCTCGCCAC CGGCCTGCGA AGCCAGCATC TCCGTGAAGG TGGATGGAAG    360
CGCCTTTGTC CTCATTTTGA GCTGCAAGCT GGGTCAGCGG CTCTGAAGCC CTCGAG    416

```

## (2) INFORMATION FOR SEQ ID NO:889:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GTAGGCCATG	AAGGCCGAAT	GGAAAAAGTC	AGTTAAAGAG	GACTCAGTCC	CCACAGGTGC	60
GGAGGAGAAT	GTGGTGTGTG	AGTCACCAGT	AGAGATTATA	AAGTCCAAGG	AAGTAGAATC	120
AGCCTTACAA	ACAGTGGACC	TCAACGAAGG	AGATGCTGCA	CCTGAACCCA	CAGAAGCGAA	180
ACTCAAAGA	GAAGAAAGCA	AACCAAGAAC	CTCTCTGATG	CGGTTTCTCA	GACAAATGAC	240
ATCAGACTCC	ACAGAAAAGA	CTATCACACC	GCCAGAGCCT	GAACCAACAG	GAGCACCACA	300
GAAGGGTAAA	GAGGGCTCCT	CGAAGGACAA	GAAGTCAGCA	GCTCTCGAG		349

## (2) INFORMATION FOR SEQ ID NO:890:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 719 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGGATGCT	CTGGGTTTGC	TGTAGTCGTC	60
TGTTACTGGT	CNTGTTAGGA	GGAGGGCCAG	GGGGACCCCC	ACCTGGGGCA	GTCCTTCTG	120
TCCCTTCAGC	AGGTGGCTGA	GCTGGAGCAG	ACATTTTTCT	GACAGAGAGA	GTGAGGGTCT	180
GTTCCTCTCC	GGAGGCTGCG	GCGAGACACC	CGGCGAGGGA	CGCTGCGGCT	GAAGTGGACG	240
GAAGTGCCAA	GCTCCGCCTC	GCGCCGACTA	CCCCGCGGTC	TAGCTGCGCT	GGGGTTTCAC	300
CATGTTGGCC	AGGATGGTCT	CGATCTCTTG	ACCTTGTGAT	CTGCCTGCCT	CGGCCTCCCA	360
AAGTGTGGA	ATTACAGGTA	TGAGCCACTG	TGCCTGACAC	CTGTCAAATT	ATTTTACTGT	420
GTTTATTAC	CATGTTTCTT	TCACTGTGGG	GTCTCTGTCC	TTGCTGTTT	GTTTTTCTTT	480
TAATCTCTTT	TGTTATTTAG	GAAGGTTTAT	ATTAATATTT	TAATTCTACA	TTGGATAATT	540
CCTATATCAA	AACTATTGTT	GACAATCAGT	TACAGATGGA	ACTTCGTCTA	CTCTTTCTCC	600
CCTTCTCACT	CCTGCTCTTT	CTCCCTTTCT	CACTCCAGCA	GTGACTAGT	CTCATTGAAA	660
AAACAAATTG	GGGCCGGCCA	GGCATGATGG	CTCATGCCTG	TAATCCGAGA	CAACTCGAG	719

## (2) INFORMATION FOR SEQ ID NO:891:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 453 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC	TTCATGGCCT	AGATACTCCG	CTGAAGATCT	GATGTCACCC	CAAATGCATG	60
GCTCCAGCCT	CAGTTCAGCT	TTCCACACTG	CTTGCAAGAA	TTCTTTCATT	TATCTTGAGT	120
TTCTCCTCTC	ACTCCCATGG	TAGCTTTTCC	ATTCCCACTG	CCTCTTCTCA	CATTTTCAGTA	180
GATGAGAATA	GAAGCCATAG	GAAGCAAAC	TCCTCAACCT	CCAGCCAACC	GCCGAGCGAT	240
GGGCATCTCT	CGGGACAAC	GGCACAAGCG	CCGCAAAACC	GGGGGCAAGA	GAAAGCCCTA	300
CCACAAGAAG	CGGAAGTATG	AGTTGGGGCG	CCCAGCTGCC	AACACCAAGA	TTGGCCCCCG	360
CCGCATCCAC	ACAGTCCGTG	TGCGGGGAGG	TAACAAGAAA	TACCGTGCCC	TGAGGTTGGA	420
CGTGGGGAAT	TTCTCCTGGG	GCTCAGACTC	GAG			453

## (2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC TTCATGGCCT ACCAGCCTCT GGGCTGAGGC AAAGACCTCT GAGGCCCCGT	60
CCACCCAGGA CCCCTCCACC CAGGCCTCCA CTGCGTCCTC CCCAGCCCCA GAGGAGAATG	120
CTCCGTCTGA AGGCCAGCGT GTGTGGGGTC AGGGACAGAG CCCAGGCCA GAGAACTCTC	180
TGGAGCGGGA GGAGATGGGT CCCGTGCCAG CGCACACGGA TGCCTTCAG GACTGGGGGC	240
CTGGCAGCAT GGCCACGTC TCTGTGGTCC CTGTCTCTC AGAAGGGACC CCCAGCAGGG	300
AGCCAGTGGC TTCAGGCAGC TGGACCCCTA AGGCTGAGGA ACCCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT GGACAAGCTG AAGGAGCAAT ATGATGCTGA GTTGCAGGCC CTGAGGGAGA	60
GTGTGGAAGA AGCAACCAAG AATGTCGAGG TCTTGGCGAG CAGGAGCAAC ACTTCAGAGC	120
AAGACCAGGC GGGGACTGAA ATGCGCGTGA AGCTTCTGCA GGAGGAGAAT GAGAAGCTGC	180
AGGGAAGAAG CGAAGAGCTG GAGCGGAGAG TTGCTCAGCT TCAAAGGCAG ATCGAGGACC	240
TGAAAGCGGA TGAAGCCAAG GCGAAGGAAA CGCTGAAGAA GTACGAGGGA GAAATACGAC	300
AGTTAGAGGA GGCCCTTGTG CACGCCAGAA AGGAAGAAAA AGAAGCTGTG TCAGCCAGAA	360
GGGCCCTGGA GAATGAACTG GAGGCTGCTC AGGGAAATCT GAGTCAGACT ACCCAGGAGC	420
AGAAGCAGTT GTCTGAGAAG CTCAAAGAGG AGAGTGAGGC GCTCGAG	467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGGC TTCATGGCCT ACTCAGCTTT CCTGGTCTCC CATCTGAACT GCTTCTTTGT	60
GCACCTCTTG TTCTTTCTCT TGGCTCCCAG TCTTGATTCC TGTGATCACT CTTGCATCAC	120
TAATTGCACA AGTGATTCA GGTGCAATTC TGATTAGCCT GCGTCCACAC AGTGATCGAT	180
GATCCTATGT GCCTAGAAAG GACACTGTGT GCTGCTCATG ACCTGCAACA GGAAAAAAGC	240
CATTCTTGT TAGCAGTCTA AGAACCTTAG AGCAAAGGAG TTGACCTTCT GATTGAATAT	300
AAGCACAACC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG      60
CTGGTGTGTC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGC GCA TATGTGATGA GTGTAACATAT GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACTCG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GAATTCGGCC TTCATGGNCT ANTCTCATT NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTTATC TGTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCTGT GTAGCCTTCA      240
CTTTTTTCCA AAAGAAGTCT ATTAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTCAGCA CCCAAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG                   473

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GCTCGAGTGA AGTGGTATCT CATTGTGGTT TGGGTTTTAA TTTTATAATA TTTTAATTTT      60
TAAATCAAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAATCAGCC GGGTATGGTG GCAGGCACCC      240
GTAATCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA      360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTACTGTTTT      480
CATTTAACTT TCTCTGTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAGAATG      540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG                   594

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```
GAATTCGGCC TTCATGGCCT ACTGTACATT TTTTAAAG TTTGTTGAAA AGAATATTGT    60
CTTATTCTAT AAAACATTTT AAACCTAGTT AGAGATTTGT AATCAAAAAA CATTTCGCGA    120
GAAAGCAGCA CTTAGGGCTG CCTGTTCTAT ACCCTACAGT CAGACAGGAA AAGAACTGAA    180
AATGGCACCC TTCTGACAT CTGAGGCAGC TGGACTGGCA GCCAAGTAAA GGAGAGTGAT    240
GAGGTGGTGT GGGGAGGGTG GGGAGGCAGC GCGAGGGTGC TCTCCACAGG GTAGGTCTCG    300
AG                                                    302
```

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```
GCGGCCTTCA TGGCCTAGTG CTTGTCAGTT TGGAAAGTCA CAGGGAGTTT ACCATTCTAT    60
AATTAGAGTA GGAGGAAAAT GAGAACCAC TGGTAGAAGA AGAAGCAACA GTCTTCTAGG    120
GTCTGGCATT TGATGAGATA GGTATTCACT TACTGTGCAT TTCCATTGTT TTTCCATGGC    180
AGAACATACG GCAGAGATTT GGGAACTCGC ATGCCTGAAG CCAGGTTATT CTTATGTTCT    240
GTAACATATG TGCTCGCAGG GCTGTTGTTG TCAGAGTAGT GAGTTGTGCC CCAGACAAAT    300
GGGGTGCTGG TCTGCTCCCA CAAATCTTTA TCCAGTCTT CATCGCAAGG AGGGCACTGC    360
CAAGTGCTCT CAGCCAGAGT CTCTGTCTA AGGCTCCTGG TTTGGTTGAC AACATCTTGC    420
TCAATACAAC TTCTGTCATC ACAGCTTGAG ATATGATGAC TAATTCAGC TCGAG        475
```

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```
GAATTCGGCC TTCATGGCCT ACAGCTGCCT TTTTCTTTAA AGGGGTTCTT GTCTTCTGGA    60
ATTCCCTTTA CTAGAGGATC CTCTCCAGAA CGTTCTTCAA TATAGTTCTT TATTTCTTCA    120
GAACATTTAG ACACTTGTTG TCTCTGCAAC TTCACTTCTT TGCGAAGCTG CTCAACTTCC    180
ATTTTCAGTT TTTCTTCTC TGGCAAATCT TCGATGTGAA GGGCAGGCAT TTTGCCCCCA    240
GAACCGGGCT CAGGCTAGCT CTGGCAGCGG AGCCGCTGGA AGAGCGGCGA AGCTCGGCGC    300
GTCCCGAAAC AACTGAAGGC CTGGCCCCGC GCCCAGCCGC GCAGGATGTG ACTGCAGCCC    360
TGCTGCGGTC CCCAGCTCCC CGAGGGCTTG GCTTTCTCCG GGACGCTTGT CACGCCAGCG    420
TGCCCCAGCT TCCTAGGACC TGAGAACTCT GCCTTTTCTC AAGTCCCTGC AACCCAGGAG    480
GCCTGCCCGG GTGCTAGTAG GCCATGA                                507
```

(2) INFORMATION FOR SEQ ID NO:901:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 495 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```
GAATTCGGCC TTCATGGCCT AGTTTGGATT TTCATATTAG GGATACTCAA CTGGTATTAT    60
TATTCTGGCC CCTGCAAAT TTTCACTAGG TCCCCTAGTA TGTCATGCCA GGGACTATGN    120
GAGTTCCTGG GAATAGCACT GTAANACATT CTTGAGTGGG TCCTTGACTC CATTGAGTTT    180
ATAATCTCGT AGGAGGAAGG CTATGAAGAA TTCTAATAAA GCAAAGCAAG CAATCACAAC    240
AAACCTTCCT CTTTAACTTA TCAAAAATGG AAACCTTGAA GAGCTGCTCT TTAATAAATC    300
ATTGGAAGC ACCAGGACCC AGGTGTTTGG ACTCAGCCTC ATTTGAGACT GAGATCTGAG    360
GCCATGATAA CTCATGTGCC TATATATGCT GATAATCACC ATTACCTATA CCATTCTTTA    420
CATTCTCTCA TCTACACAAT CATCTTCAAC TCTCTCTCAT CCACCTCAGC GATTGAATTC    480
TTTACCGGCC TCGAG                                         495
```

(2) INFORMATION FOR SEQ ID NO:902:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 266 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```
GAATTCGGCC AAAGAGGCCT AGAATCCAG ACCTAGCTCA ACCCATGCCT CTTTCTCTTC    60
CTTCCCTCCT TCCTTCTTT CTTTCTCTT TTCTCCTTCC CTCCCTTCTC CTTTCTCTTC    120
TTCTCTCCCT CTTTCTCTT CTCCCTTCTT CTTGCTCTTC CTTCCTTCTC CCTCCCTCC    180
CCTCCCTTCT TTTCTTCTT CCTCCCTTC CATCTCTTTC TCCCCCACC CCCGTTTCTT    240
CTCTTTGGAG AGATGTACAG CTCGAG                                         266
```

(2) INFORMATION FOR SEQ ID NO:903:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```
GAATTCGGCC AAAGAGGCCT AAATGAGAGC TGAGTGAAGT GGATGCCCT TATAAAACA    60
TCAGATCTCG TGAGAACTTA CTATCACTAG AATAGCATGG GGAACCACC CCATGATTCA    120
GTTACCTGCC CCCAGGTCTC TGCCACCACA CATGGGGATT ATGGGAACTA CAACTCAAGA    180
TGAGATTGG GTGGGGACAC AGGCAAATTA TATCAGCTGT TGTGCTCATT AGTTGTATA    240
TCATCCTTGG CTCCTTAGC ACTATAAGGG CAGGATTGAG TCCTTGCAAC AGAAACCATT    300
CAGCCTGCAA AGCTGAACCT ATTTACTTTC TGACCCTTTA TGGAAAAGTT TACTGATCTC    360
TGGACTAGAC AGTTTTTAA AAATGACATC TTATGACCG GATTCTCGAG    410
```

(2) INFORMATION FOR SEQ ID NO:904:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```
GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAA AAAAAGAAAA AAAGCTGCTT    60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCA GGCGATTCTT    120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTG    180
GTTGAGCCTC AGTGTCTATT CATTGAGTG TCACCAAGAG TTGGGGTGG ACTGATCATC    240
AGCATTTACA GTTTGGAAA TTGAATTTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG    300
CAGATTTAAA CGGAAGGACA CTCGAG                                     326
```

(2) INFORMATION FOR SEQ ID NO:905:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```
GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC    60
CCCTACAAGG CCTCACAAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT    120
AATGTGTATG CTCGCAAGA GAGCTTGCCT ATACCTTGAT TATTCATAA AATCACATGT    180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT    240
TCATAGTTGT TTTCCAAAGA CAAATTTAAA TGTTGTCTGT TATCTCCTTA CTTAGTTTAA    300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTGCAAT TTAAAAATA TTTGGGACTG    360
GGCATGGTCG CTCACGCCTG TAATCCCAGC ACTTTGGGAG GCATCTCGAG                                     410
```

(2) INFORMATION FOR SEQ ID NO:906:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```
GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTCAAGCG ATTCTCCTGC CTCAGCCTTT    60
TGAGTGGCTG GGA CTACAGG TGGATGCCTC CATGCCTGGC TAATTTTGTG TATTTTAGTG    120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA    180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTCGAGG    240
TACAGTTTGG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT    300
TCAACTTATT TTGCCCTGTG GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT    360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG    420
ATTGACAAAG GTCTCTCCTC ATCCCCAAA TAAATAACAT TTTTTCATT ATAATAGTAA    480
TACACCACTC GACTCGAG                                     498
```

## (2) INFORMATION FOR SEQ ID NO:907:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AAAGTGTGTC TGGTTTCACA TCACGACAGC AACGGGATTC      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACTTGA TCTTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTTGCTTTT CTTGGGTTTC TTGGCTGCTT GGTCAATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCACG TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCGTTTCCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT CTTGTTTTTG GAAGCTCAAC      300
CAGTGGCTGA TGATTACAT GTTTCACGTC CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTTCT GGCACTGGGA CGGCCTGGTC AGCAGCCTGT ATCTGCCTCA TTGACACTG      420
TTCCTTGTCG GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G                                                                                   481

```

## (2) INFORMATION FOR SEQ ID NO:908:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGTTGTA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTTCCACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTCAACAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG                                764

```

## (2) INFORMATION FOR SEQ ID NO:909:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

```

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC      60
AATTGCGAAG ATGAAGGCTC TGTGGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT      120
AGCCGAGGGA GAGCCGGAGG TGACAGATCA GCTCGAG                                157

```

## (2) INFORMATION FOR SEQ ID NO:910:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 487 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```

GAATTCGCGG CCGCGTCGAC AGAATAGACC TGGTTTGTGA ATTATGGCCT GGATTTCACT      60
TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTCC CAGGCTGTG TGACTCAGGA      120
ATCTGCACTC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTCGCT CAAGTACTGG      180
GGCTGTTACA ACTAGTAACT ATGCCAACTG GGTCCAAGAA AAACCAGATC ATTTATTCAC      240
TGGTCTAATA GGTGGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC      300
CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT      360
ATATTTCTGT GCTCTATGGT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAACCTGAC      420
TGTCCTAGGC CAGCCCAAGT CTTGCCATC AGTCACCCTG TTTCCACCTT CCTCTGAAGA      480
GCTCGAG                                487

```

## (2) INFORMATION FOR SEQ ID NO:911:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 478 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```

GAATTCGCGG CCGCGTCGAC AGTTACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA      60
TATCATCCTC TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCCAGGTCC AACTGCAGCA      120
GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCCTGCA AGGCTTCTGG      180
CTACACTTTC ACCAGTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA      240
GTGGATTGGA ATGATTCATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG      300
CAAGGCCACA CTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT      360
GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC      420
TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCCAAAA CGCTCGAG      478

```

## (2) INFORMATION FOR SEQ ID NO:912:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGCGG	CCGCGTCGAC	CCAGGATGCC	GCGCAGCAGA	GCTCTGATTC	TGGGGGTCCT	60
CGCCCTGACC	ACCATGCTCA	GCCTCTGTGG	AGGTGAAGAC	GACATTGAGG	CCGACCACGT	120
AGGCACCTAT	GGTATAAGTG	TATATCAGTC	TCCTGGAGAC	ATTGGCCAGT	ACACATTTGA	180
ATTGATGGT	GATGAGTTGT	TCTATGTGGA	CTTGGATAAG	AAGGAGACTG	TCTGGATGCT	240
TCCTGAGTTT	GGCCAATTGG	CAAGCTTTGA	CCCCCAAGGT	GGA CTGCAAA	ACATAGCTGT	300
AGTAAACAC	AACTTGGGAG	TCTTGACTAA	GAGGTCAAAT	TCCACCCAG	CTACCAATGA	360
GGCTCCTCAA	GCGACTGTGT	TCCCCAAGTC	CCCTGTGCTG	CTGGGTCAGC	CCAACACCCT	420
CATCATGCTC	GAG					433

## (2) INFORMATION FOR SEQ ID NO:913:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 139 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGCGG	CCGCGTCGAC	GCAAGATGGA	TTCACAGGCC	CAGGTTCTTA	TATTGCTGCT	60
GCTATGGGTA	TCTGGTACCT	GTGGGGACAT	TGTGATGTCA	CAGTCTCCAT	CCTCCCTGGC	120
TGTGTCAGCA	GGAGAGAAG					139

## (2) INFORMATION FOR SEQ ID NO:914:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 166 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGCGG	CCGCGTCGAC	ATCATGGCTA	CCCTGCGTGT	CCCACTCCTG	GTGGCTCTCG	60
TCCTTCTTGC	TGTGGCAATT	CAGACCTCTG	ATGCAGGTCC	CTATGGTGCC	AATGTGGAAG	120
ACAGTATCTG	CTGCCAGGAC	TACATCCGTC	ACCCTCTGCC	ATCAGC		166

## (2) INFORMATION FOR SEQ ID NO:915:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 590 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

GAATTCGCGG	CCGCGTCGAC	TTCTTGGGCA	GCACAGAAGA	CAGAGCCGAT	TTTGACCAAG	60
CTATGTTCCC	TGTGATGGAG	ACCTTCGAAA	TCAATGATCC	AGTGCCCAAG	AAGAGAAATG	120
GGGGGACCTT	CTGCATGGCA	GTCAATGGCA	TCCACCTGAT	CCTGCTCACG	GCAGGTACTG	180
CACTGCTGCT	GATTCAAGTT	CTCAATCTGC	AGGAGCAGCT	CCAGATGCTA	GAGATGTGCT	240
GTGGCAATGG	ATCACTAGCT	ATCGAGGACA	AGCCCTTCTT	CTCGCTGCAG	TGGGCACCCA	300
AAACACACCT	GGTACCTAGA	GCACAGGGGC	TGCAAGCCTT	GCAGGCCAG	CTCAGCTGGG	360

TCCATACCAG	CCAGGAGCAA	CTCCGTCAGC	AGTTCAACAA	CCTCACTCAA	AATCCAGAGT	420
TGTTCCAGAT	TAAAGGTGAA	CGAGGCTCTC	CAGGTCCAAA	AGGGGCCCCG	GGTGCTCCTG	480
GAATCCCCGG	GCTGCCTGGG	CCAGCTGCTG	AGAAGGGAGA	AAAGGGGGCT	GCAGGTCTGT	540
ATGGAACCCC	AGGTGTCCAA	GGACCCCAGG	GCCCACCAGG	AAAACCTCGAG		590

## (2) INFORMATION FOR SEQ ID NO:916:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

GAATTCGCGG	CCGCGTCGAC	GGAAGAGCAA	TGAAAACATA	TGCTCCTACA	TTATTCATGT	60
TTCTATGGCT	GCAGCTGGAT	GGGATGAGCC	AAGGTGAGCA	GGTGAGCAG	CTTCCTTCCA	120
TCCTGAGAGT	CCAGGAGGGA	TCCNGTGCCA	GCATCAACTG	CACTTATGAG	AACAGTGCCT	180
CCAATACTT	CCCTTGGTAT	AAGCAAGAAC	CTGGAGAGAA	TCCTAAGCTC	ATCATTGACA	240
TTCGTTCAAA	TATGGAAAGA	AAGCAGACCC	AAGGACTCAT	CGTTTTACTG	GATAAGAAAG	300
CCAAACGTTT	TCCCTGCACA	TCACAGACAC	CCAGCCTGGA	GACTCAGCCA	TGTACTTCTG	360
TGCTGCAAGT	GAGAGCACCA	ATACAGGCAA	ATTAACCTTT	GGGGATGGGA	CCGTGCTCAC	420
AGTGAAGCCA	AACATCCAGA	ACCCAGAACC	TGCTGTGTAC	CAGTTAAAAG	ATCCTCGGTC	480
TCAGGACAGC	ACCCTCTGCC	TGTTACCGA	CTTTGACTCC	CAAATCAATG	TGCCGAAAAC	540
CATGGAATCT	GGAACGTTCA	TCACTGACAA	AACTGTGCTG	GACAATCTCG	AG	592

## (2) INFORMATION FOR SEQ ID NO:917:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

GAATTCGCGG	CCGCGTCGAC	GAATGAGGTG	CTCTCTTCAG	TTCTTGGGGG	TGCTTATGTT	60
CTGGATCTCT	GGAGTCAGTG	GGGATATTGT	GATAACCCAG	GATGAATCT	CCAATCCTGT	120
CACTTCTGGA	GAATCAGTTT	CCATCTCCTG	CAGGTCTAGT	AAGAGC		166

## (2) INFORMATION FOR SEQ ID NO:918:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCGG	CCGCGTCGAC	GTCTGAGAGG	AACCCCTTCTC	TGAGGATGGA	CACTTCTCAC	60
ACTACAAAGT	CCTGTTTGCT	GATTCTTCTT	GTGGCCCTAC	TGTGTGCAGA	AAGAGCTCAG	120
GGACTGGAGT	GTTACCAGTG	CTATGGAGTC	CCATTGAGA	CTTCTTGCCC	ATCAATTACC	180

TGCCCCTACC CTATAGTGAG

200

## (2) INFORMATION FOR SEQ ID NO:919:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCAGTGT T	231

## (2) INFORMATION FOR SEQ ID NO:920:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGCGG CCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTG GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

## (2) INFORMATION FOR SEQ ID NO:921:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTGGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTG GGGAACAGTG	120
TGGGTTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

## (2) INFORMATION FOR SEQ ID NO:922:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC	AAGAGGCCTA	CTTAGAAGCC	AAAGAAGGAG	ATTTGCACAG	GATAGAAATC	60
CCATTCAAAT	TCCACATGCT	GCATTCAGGG	CTGGTCCACG	GCCTGGCTTT	CTGGTTTGAC	120
GTTGCTTTCA	TCGGCTCCAT	AATGACCGTG	TGGCTGTCCA	CAGCCCCGAC	AGAGCCCCTG	180
ACCCACTGGT	ACCAGGTGCG	GTGCCTGTTC	CAGTCACCCAC	TGTTCGCCAA	GGCAGGGGAC	240
ACGCTCTCAG	GGACATGTCT	GCTTATTGCC	AACAAAAGAC	AGAGCTACGA	CATCAGTATT	300
GTGGCCCAAG	TGGACCAGAC	CGGCTCCAAG	TCCAGTAACC	TCCTGGATCT	GAAAAACCCC	360
TTCTTTAGAT	ACACGGGCAC	AACGCCCTCA	CCCCCACCCG	GCTCCCACTA	CACATCTCCC	420
TCGGAAAACA	TGTGGAACAC	GGGCAGCACC	TACAACCTCA	GCAGCGGGAT	GGCCGTGGCA	480
GGGATGCCGA	CCACCAGACT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	AAAGAGGCCT	ACATTCATCA	AGTCATCCAA	CTTCTATAGT	CAAAGCAGGA	60
TCATGTGGCG	AAGCATATGC	TCCACAAGGG	TGGATAGCTT	TTTTCATGGA	ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCGGCC	AAAGAGGCCT	AAAGAGAGTG	GAGGAGGAGG	ACAAGATTGA	TACTATGAGA	60
GTTGGAGGAC	ATAATTCATG	GATCATAGCT	CCAGAAGTGA	AAAGGGAGGA	AATGTAGACA	120
GAGGAAGGCA	TTAGCCATTG	AGAAGAATAG	GGACATATTT	TCTTTACTCT	CTTGTCAGAG	180
GAAGATAGCT	GGGGGAGTAT	AGACAAGTTG	TAAGAATGAA	GGAAGGAAGG	CAAGAGCAGA	240
CTTGTCGGAT	GAATTTTATT	TTCTCTATGA	AGTTTGAGAA	TTAAACTTTA	TGCTGAGAAG	300
GAGGCGAGGA	GAGACTGTAT	ATGGAATGTA	AGGTTTGGA	TAACCAATGT	AAGTTTGGG	360
AATGAGAAAG	CCACCTAGGG	ATGAGGAAAA	AATATTAAAA	ATTTTGTATC	CACTGAAAAAT	420
TCTTCAACAG	TGTAAAATGA	AGCATGCTCA	ACTGGAAATG	GTCATATATC	TAAAAGAAAA	480
TGGATTTATT	TTGTTATTTT	TCTCTATATT	TGTAGTATTT	TACAGTAAGC	ATGTATTACC	540
TTTATAGTGA	AAAAGTGTC	TTTTTTTACA	TTGGTCAATT	TTTTGTTATT	AAATTTTCATG	600
CTTGTTTTGA	ATTGTTTCTT	GTGTGTATGA	TTGCAATATC	AGGTATTGTA	TGTGGTGATG	660
TGTGTGATTC	AGAAGTCAGA	AGACTTAAGT	TCCGACACCC	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid



(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

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GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTTCCTG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTAATCATT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCAGTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTCAGTAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCAGTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTACTCACAG ACAGGCAGCA AGGGACTCGA G              651

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(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 700 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```

GAATTCGGCC AAAGAGGCCT AAAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAAGA TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCCACTGC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAAATG TTAATAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAACTTG CCAAAGATTG GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCAATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAATAT TCCTCAATTC TACCTAATGA TGTACAACT ACCTCTGGTG ATCTCAAATT      480
GGACAAAATT GATCCCCAAA GACAGGAAAT TCTAGTAAAA TTAGTAGATG TGCCTACTGG      540
TGATTGTCAT ATTTCTCCAA AGAATGTCAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCCTA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG              700

```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```

GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGA CCCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGGAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAATCAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGGCAGGG      180

```

CCTCTACCTC ACTGTGATCT TCGACCTGGC GACACAGGAC AGCCACACAG AAGCACGCCA	240
ACACACTTAA AGCTTTGCTC CAACTAAATC ATTTAGTTTC CCTTGAAGAA ATAAGTAAA	300
AAAAAAACAA CTGCTGACAT CTATGTCTGT AGCTCGATTT TACAGTCTGC TCTTTGTGAG	360
AAAGGAAAAT CACTCGAG	378

## (2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

GAATTCGGCC AAAGAGGCCT AATATTTTAC ATTTCTCTTT TCTAAAAGTG TAAATTTTTC	60
ACTTTAAAAT GAAGCAAGAA TTAAATAAAT AGAACAAATA CCATATATCA TCACAGAGTC	120
AATATATTAT GGTCTGTTC TGACCAAGTG TTGCATTGTA TTTGTGTTAC CAGAACTGCA	180
GGGCTTTCTA TGGCTACATG GTCAGTGCAT GCTCAGACAG CTGTTAAAAT CAAAACCTTC	240
ACTGTGCTGG GTCACCTGGT AACTACTGTC TATCTCACA GTGCATTCTG CTGACATTCA	300
AGGGTTAAAC TGGTTTCTAG TAAATACTGT GCTTTAAAGT AGTACATACT GTGAGCTGTG	360
TTATTAGAAA CCTGCTTGTC CTTGTGTCTG AAAATAAGGA GGAACACTCT CGCACCAAAAT	420
CTCGAG	426

## (2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

GAATTCGGCC AAAGAGGCCT AGGTAAATGT TAGTGGAAAA TTTTATGAGT ATATGCTGAA	60
AGGAGAGATT AGTTCACATG AACTCAATAA TGTTCAAGAT AATGAAATGC TTAGAAAGGT	120
TACTTTTGAT CCAGAAGTAT TTTTCAACAT ATTACTTCCT CCTATCATAT TTTATGCAGG	180
TTATAGCCTG AAAAGGAGAC ATTTTTCG AAATCTGGG TCTATCCTAG CATACGCTTT	240
TCTTGAACA GCAATTTCTT GTTTCGTTAT TGGGTCAATA ATGTATGGCT GTGTAACGCT	300
GATGAAGGTA ACGGACAAC TCGAG	325

## (2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

GAATTCGGCC AAAGAGGCCT ATGGACACCC TGTGCCCCAA GCCGATGGCC CCACCCAGCA	60
GCATCAGCAC AGNTGCCCC CTTCTCCGCA GAGCAGGCTC TCCTTTACGG GACTCTCCTC	120

TTCCCTCCCA	CCTGATGCGC	ATCAGCAGCC	ACGGGCCTGG	CCCTTGAATC	TTGTCTAACT	180
GCACTCGCTG	CCTGGTGGCC	TCATCCCACC	CCAAGACCAC	TGCACTGATG	GCTCCAACCC	240
CAACTTCTCC	CTGCACTCAG	CTTATGAATA	CGACGGCCCT	CATTGCATCC	ATGCAGAGAC	300
CTCAGAGGCA	GCTCAGCTCA	GTGCTCAGCG	TGGCACTCGG	GGCTTCACAC	TTCCCCCGT	360
GTCTGTCTG	AGAAACTGT	GACACCATCA	ACCCAATAA	CTCGAG		406

## (2) INFORMATION FOR SEQ ID NO:931:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC	TCATGGCCTA	CCAGACTGTA	AACATTCCAG	GTCTGAAAA	AGTGTGGAC	60
CAGTCTCCTA	CTGTTATGTT	CTCCAGTTTT	AAAAATGTAA	AATCAGTTGA	AACACTCGAT	120
CAGAAGGCAG	ATGAAGTCCT	TGACTGTCAG	AGTAACCAAA	ACAGACCAGA	TGAATGCAAA	180
AGTGAAGGTC	AGTCAGCCAA	GGAGATGCTA	AGTAGTGACC	AGAGAGAGAC	TGTCACCGGA	240
CTCGAG						246

## (2) INFORMATION FOR SEQ ID NO:932:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC	TTCATGGCCT	ACTCCATTGT	CAGCCCAATT	TCCCCTAGTC	CAAGTTTTTT	60
CTTTGCTGAT	TCCTTTGTCC	ATGTGTGCTT	TGAGCCTCTC	TCATCTTGTC	TTTCCTCCTT	120
TCCTAGGAGC	AGCTCTTGAA	GCAGCAGCAG	CAGCACCAGT	GGCAGCAGCA	TCAACAGGGC	180
TCTGCCCCTC	CTACCCAGT	GCCCCATCA	CCACCACAGC	CTGTGACCCT	GGGGGCTGTG	240
CCAGCTCCAC	AGGCTCCACC	CCCGCCCCAC	AACTCGAG			278

## (2) INFORMATION FOR SEQ ID NO:933:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC	TTCATGGCCT	ACGAGTGCGA	CCAGCCAGAT	GAGCGCCCGG	TCCTGGTGAA	60
GAGCATTAC	TACCTCTACT	TCTCCATGAT	CCTGTCCACG	GTCACCCTCA	TCACTGTCTC	120
CACCGTGAGC	TGGTTCACAG	AGCCACCCTC	CAAGGAGATG	GTCAGCCACC	TGACCTGGTT	180
TACTCGTCAC	GACCCCGTGG	TCCAGAAGGA	ACAAGCACCA	CCAGCAGCTC	CCTTGTCTCT	240
TACCTCTCT	CAGAACGGGA	TGCCAGAGGC	CAGCAGCAGC	AGCAGCGTCC	AGTTCGAGAT	300

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360  
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGCTCCCGGC 420  
 C 421

## (2) INFORMATION FOR SEQ ID NO:934:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 449 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGACTA 60  
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120  
 AGACACCTGC TGACCCAAAA CTGAAACTC TAAGTCAAAC CAAAAAAAC AAAGGATCTG 180  
 ATAGCTCACT CTCTGTAAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240  
 ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300  
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360  
 GTCATTCTTC AGTTAAGGAA CAAAACCAC TAGAAAAAGT GTTCTTTAAA GAAGATACAG 420  
 TGAAACTCA TGGGGATACA ACTCTCGAG 449

## (2) INFORMATION FOR SEQ ID NO:935:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 421 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTGTGAC TATCTATAGA TATTAGTTGG 60  
 CATTCTACTG TAAGGAAAAC TTTCTTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120  
 AGTCATTTTT CCAAGGAGAC CTAGTTCCTT TTTGTGAGGA GTTGTTTTGA GTTCATTTTG 180  
 AAGTTCATTT GAAGTTTGA GTTCATTTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240  
 TATTTATTCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300  
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTC CATTCTCTCT 360  
 CTTTCTCCT TGTAGGACTT CATTACAAG GATGTAGAA CTTTTTACCA TGGCTCTCGA 420  
 G 421

## (2) INFORMATION FOR SEQ ID NO:936:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 648 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

ATAGAAATGT	CATAATTCT	CCTTTATTCT	TGAATGATAG	TTTTGTGGGA	TATAGACTTG	120
CTGGATATAG	AATTACTGGA	TATAGAATTG	CCAGATATAA	AATTCCTGGT	TCAAAGTTTT	180
TTTCTTTGA	GGACTTTGAA	TGTCATCCCA	CTGTCTTCTG	GCCTCCATAG	TTTCTCATAA	240
TAAATCAGCT	GTTAATCTTC	ATTAAGTTTC	CTCTGTACAC	GAAGAGTCAC	TTGTCTCTTG	300
CTGCTTTCAA	ATTTTCTCA	TTTGCTTTGG	GTTTTCACAC	TTTAATTATA	TGCCTTTCTA	360
TGTGGATCTC	TTTGAGTTTA	TCCTGCTTGG	AGTTCATTGA	GCTTTTGGCA	TCGTATATT	420
AATTTCTTTC	ATCAGATTG	GAGATGTTT	TGGCATTAT	TTCTCAAAG	TTCTTCTGC	480
TTCTTCTCT	CCTTCTCCT	CTGGGTCACC	ACAATGCATA	TGTTGGTCTA	CTTGATGATG	540
TCTCACAGGT	TCCTTAGACT	CTGTTTACTT	TTCTTCATAT	TTTTTCTTT	CTGTTTCTTA	600
AATTTGGATA	ATTTTGGTTG	TCTTATATTC	AAGTTTGCTG	ATCTCGAG		648

## (2) INFORMATION FOR SEQ ID NO:937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC	AAAGAGCCT	AGAGGATGGG	AAGCTTGGGG	AGAGAAGATA	CTGAAATGCT	60
AGAAACTGAG	CCAGTAGAGG	ATGGGAAGCT	TGGGGAGAGA	GGACATGAGG	AAGGATTCTT	120
GAACAACAGT	GGGGAGTTC	TCTTTAACAA	GCAGCTCGAG			160

## (2) INFORMATION FOR SEQ ID NO:938:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCC	AAAGAGCCT	AGAAAACTC	AGGAAAGAAA	TTGCAGACTT	CGAACAACAG	60
AAAGCAAAAG	AATTAGCTCG	AATAGAAGAG	TTTAAAAAGG	AGGAGATGAG	GAAGCTACAA	120
AAGGAACGTA	AAGTTTTTGA	AAAGTATACT	ACAGCTGCAA	GAAGTTTTC	AGATAAAAAG	180
GAACGTGAAG	AAATACAGAC	TTTAAACAG	CAAATAGCAG	ATTTACGGGA	AGATTGAAA	240
AGAAAGGAGA	CCAAATGGTC	AAGTACACAC	AGCCGTCTCA	GAAGCCAGAT	ACAAATGTTA	300
GTGAGAGAGA	ACACAGACCT	CCGGGAAGAA	ATAAAAGTGA	TGGAAAGATT	CCGACTGGAT	360
GCCTGGAAGA	GAGCAGAAGC	CATAGAGAGC	AGCCTCGAG			399

## (2) INFORMATION FOR SEQ ID NO:939:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGGC	AAAGAGGCTA	GAAGCATCGA	AAGCGTTGGA	GAGGTGTTAC	CGGTAACGGC	60
GGCGAGAAGG	GTGTTCCCGA	ACTAGAGTGG	GGCATACATA	ATCTTGCTGC	TATGCTTCGA	120
AGCTGTAGTC	TGAATCAACC	TAAGTTTAA	ACAGAAGGTG	AACCTCTGAG	ATAGAAAATC	180
AAGTATATT	TAAAAGAAGG	GATGTGGGAT	CAAGGAGGAC	AGCCTTGGCA	GCAGTGGCCC	240
TTGAACCAGC	AACAATGGAT	GCAGTCATT	CAGCACCAAC	AGGATCCAAG	CCAGATTGAT	300
TGGGCTGCAT	TGGCCCAAGC	TTGGATTGCC	CAAAGAGAAG	CTTCAGGACA	GCAAAGCATG	360
GTAACAAC	CACCAGGAAT	GATGCCAAAT	GGACAAGATA	TGTCTACAAT	GGAATCTGGT	420
CCAAACAATC	ATGGGAATTT	CCAAGGGGAT	TCAAACCTCA	ACAGAATGTG	GCAACCAGAA	480
TGGGAATGC	ATCAGCAACC	CCCACACCCC	CCCCTCGAG			519

## (2) INFORMATION FOR SEQ ID NO:940:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCGGCC	AAAGAGGCCT	AAGAAATTAT	ACCATTTTAT	GGAATGTCAA	GCTACATCAC	60
CCGAGAAGAC	CAGTACAGCA	AGCCTCCGCA	CAAAAACTG	AAAGACCGCC	AGATCGATCG	120
CCAGAACCGC	CTCAACAGCC	CTCCTTCTTC	TATCTACAAA	AGCAGCTGCA	CAACAGTATA	180
CAATGGCTAT	GGGAAGGGCC	ATAGTGGTGG	AAGTGGCGGA	GGCGGCAGCG	GTAGTGGTCC	240
CGGAATTAAG	AAAACAGAAG	CGCTCGAG				268

## (2) INFORMATION FOR SEQ ID NO:941:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	AAAGAGGCCT	AAGCCTCGCC	TTACACTTAA	GTGCACCCGA	TCCTGCCTCT	60
GGCATCTCAC	AAACGTCACT	CCCTGGAACA	AATTTGTGAA	GGCCTCCAGA	CCACAGTGTC	120
CTCATCTGTA	AAATGGGGGT	AGTAGTAATC	CTTGCCTCAT	AAAGTTCTTG	GCAAGGATTA	180
GATGAGCGAG	CATGTGAGTT	TGGCCTCCGT	TTAAACACTC	CATAAAGTTT	CCTTTTAGGA	240
TAACAGCAGG	CCGTTTTAGA	ACCTTCCAGA	GGTTACTTAT	TCAGATATCC	TTAGGTGACG	300
ATTGGGAAGC	TGCCGTTTCT	TGAGAGCCTC	CTGGGTGACA	GATGGAGAGT	GGCCCTGGCG	360
TGACCCCTGA	CCCTATCCTT	GAGGCTTTCC	TGCCCGTCTC	CTGCCTCGAA	TGTGCTCCGC	420
AGCACATGGA	TCAGGATGGG	GAAGGGGCTG	TGTCACTGGA	TACCTTCGGC	CCCTGCCCAC	480
GTCTAGGGCC	TGTGAAAACG	AGGAGGGACA	GCAAAGAAAT	GGGGAAAGGC	TCGAG	535

## (2) INFORMATION FOR SEQ ID NO:942:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC	AAAGAGGCCT	AAAATTGTTA	ATTCTAGTCA	CCCTGCAGTG	CTATAGAACA	60
CTGGAACCTA	TTCTCCTAT	ATCACCGTAT	TTTTGTATCT	ATTAACAAAC	CTCTCCATAT	120
CCTCCCTCCC	TCCTACCCTT	CCCAACCTTT	GGTAATCACT	ATTCTCCTCT	CTACTTCTAT	180
GAGATCAATG	TCTTTATTTA	CTCGAAGTAC	TCTTAAAAGT	TTAGGACTTA	AGTATTTGAA	240
GAAATTCAC	TGCTTTTGT	TTTATTCTA	CTCAATACTT	TTTAATATAA	AGATTACAG	300
TCCTCCCTTA	CTCGAG					316

## (2) INFORMATION FOR SEQ ID NO:943:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	AAAGAGGCCT	ACAAACTCAA	GATGCCCGAG	TGGATTGGAG	GCGAGAGCGA	60
GCTCAGGAAG	TTTCTAAAAC	ATCATTTCGC	AGGAAAGAAC	TGTGAACCTC	TGCTGGTGGT	120
ACCAGAAGAG	GTAGAGGCTC	ATCAGAGTTG	GAGGACCGAT	GTGTAAACAGT	TCTGCCCAAC	180
CTCCCTCTCG	CCTCAGCCCC	TTCAGTCCTC	TGTGACGTGC	TGTGGCCTCT	ACAGTGGGTC	240
TGCCCTTGCC	ACTTCCCAAA	ACATCTCATC	AAGTTTTTCC	CCTTCAGATC	TGACAGTGCA	300
ATAGGACAGA	CGTGTGGACT	GTATAAGAA	CTACTCAGTG	TTTTGTTCCT	GGGCAAAC	360
GAG						363

## (2) INFORMATION FOR SEQ ID NO:944:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC	AAAGAGGCCT	ACTCTGACAG	TGTTTCTGAC	CTTAGCATT	TCTTTTGTAT	60
TCTTTCTTAG	AATTCTCATC	TTCTGCTTAT	ATACCTGTCT	ATTCTTGCAT	GCTGTCTACG	120
TTTCCCATGA	GAGTCCTTAG	CACATTAATC	ATGGTTGTTT	TACATTCA	GTCTGGTAAT	180
TCCAGCATCC	CTGCCACATC	TGAATCTAGT	TCTGATGCTT	GCCCTGTCTC	TTCAAACCTCT	240
GTTTTTTTGC	CTTATAATCT	TTTGTGAAA	GCCGAACATG	ATTCCTGTAC	TGGCTCTTCT	300
GGAGGCTTCT	GCCCTGTTCT	CGAG				324

## (2) INFORMATION FOR SEQ ID NO:945:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTTCTCT TGGATTCCAC TTTCTCACGT      60
GTCAGAAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTAATTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTGT      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTCAG TTGATTGGGT GTGTCTGTCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCTCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCTGT TTGTGAACAG ACACCTTGCT TCTTGATAAC ACAAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGGCCTT CGGTCATTTC TGCCCAGAGC ATAGAGGTCA      540
TTTTCACTAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAATGTTC CTCCTAAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCCATAT CCTAAGCAAA ATGCCTTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCAT ACTGTACTCG AG              712

```

## (2) INFORMATION FOR SEQ ID NO:946:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAAATAGGA      120
TGGAGTGTTT TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAA AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAGCA GAGGACAGCT GGAATGAATC AAACCGAAGA ACCAGGATCC      300
TCGAG                                305

```

## (2) INFORMATION FOR SEQ ID NO:947:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTTGTT AATGGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTTAACTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTTTTTCT TTTTCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAAA      240
CCAGCCATT TGTGTACTT TGGTAAAGGA CCTCTTCCCC TTCCTCCCCT ACACATACAG      300
ATACACCCAC CATAACTCGA G                                321

```

## (2) INFORMATION FOR SEQ ID NO:948:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTCGGCC TTCATGGCCT ACAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA    60
TCACTCAATC CAAAATAAGG CAGAAGAAGT GGAAAAGGGA GATGAAGATC AGATGGAACA    120
AAGAATATTA CTAGAAATGA CTATGTTTTA TAATGCAAAA TAGTTCAGTA CAGGAGAAAG    180
ATACAATAAT TTGAGTGCAT ATGAACTTAA AAGAGAATTT CAAAATATAT GAAGCAAAAA    240
TTGACAGAAC CCAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA TCACTCAATC    300
CAATATCTCG AG                                     312
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```
GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGA GCCTCAAGAA AAATTAGCAG    60
AGGAAAATAA TAGGTAGTTA CTATTAGGG TAACTAAAC TGTCTAAGG AATAGAAAAT    120
AAAAATTCCA TGTCTCAAA AATAATTCTT CCCTCTCAAT CTCTCTGAAT ATCTCATAAG    180
AGTATTCAGG CCACAGAAAT AACTACCATT TAGCCACTCA GAGGCTTATA GTAGTTCTAC    240
TAACTTTAAC ATTTGGCAAC CAAATTACT CTAAGAATCA TCACCCTCGA G          291
```

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```
GAATTCGGCC TTCATGGCCT AGATGGGCAT TCTGTTTATC TTAGTAGTAG TACGCAGGGT    60
ATGTTGAAAT CTCCAAGTGT GATGGTGGAC CTGTCAACTT CTCCTGTGG TTTTATCAGT    120
TTTTCCTGGG TATTTGAGG CTATTCTGAT AGGTACATAA AATACAAAAA TTGCTATATC    180
CTCCTAATTA ACACTTATTA TCAAATTGTT ACTAATGCTT TCTGTTCTTA GGCCATGAAG    240
```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGCAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GCGGTGTGCC ACCACGTTGG      120
CTAATTTTGT TATTTTGTAGT AGCTTTTTTT TTTAAACCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCTT GTTGCATTCA      240
CTATAATATG GTAGTTGTGT ATACATTTAT AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                        404

```

## (2) INFORMATION FOR SEQ ID NO:952:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GAAAAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGGCGGAACA ACTGGAAAGA ATCAATGATG CTCTTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCCTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTG ATCAGCCTAA GCGTTATGCT      240
TTGTCACCCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTG GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTATAAAG      360
GTGCTGATGG GAAGGGCTCG AG                                         382

```

## (2) INFORMATION FOR SEQ ID NO:953:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCAGCGCG CGGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GCTGCCGCTC TATAAATTCT CTCACGAGGG TCACGGGTGCG      180
GTCCACGATG AGGTCGAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
CGGGCGCGGG GGCTCAGGCT CGCTCGAG                                         268

```

## (2) INFORMATION FOR SEQ ID NO:954:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTTG TATAGAGTTC      60

```

```

TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG      120
TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTTGCCGTAG AAACCAAGCA      180
AACTGGGTGC TAAACAGAA AGGCCCATAG ATTGTACTTT TTGAGCTGTT TGAATTTGTA      240
TACCATATGC ACAACTCGAG                                         260

```

## (2) INFORMATION FOR SEQ ID NO:955:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTCGCGCAC GTCCTAAGCT GACAGTCCCT      60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGTCT TTTTTCATA ACATACACTC      120
ACCCGTATG                                         129

```

## (2) INFORMATION FOR SEQ ID NO:956:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```

GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA      60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA      120
CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC      180
CCCCACTTAA AAAGCATAGA GTGGCAAACCT GGATAAAGAG ATAAGACCCA ACTGTCTGCT      240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA      300
GAAAGATCTA TCATGCAAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG      360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG                                         404

```

## (2) INFORMATION FOR SEQ ID NO:957:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT      60
AAAATTCCTT TAAAAATAGG GTAATAAAAT AGATGAAAT TGTATCACTC AATTTGGTGA      120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT      180
TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTTGTTTT      240
GCTTTCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG                                         283

```

## (2) INFORMATION FOR SEQ ID NO:958:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT    60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAGG    120
TGATGCCGTG ATTATGCAAG AAACAGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA    180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCACT TCTCCCCTTT    240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG    300
GCCGAATTC                                     309

```

## (2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT    60
TAAAGGCATT ATTTCATAGA CTTTCAACT ACCCATATAA CATTATTATC TTCATTTTAC    120
AAATGAGGAT AATAATGTGA TATCTCGAG                                     149

```

## (2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 455 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTAAAT    60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA    120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGATC    180
ATTAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTTAT    240
TTCATAGTAA TTCCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTTT GTATGTCTAT    300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG    360
TCTCTATTTG GGAATCTCTG AATTTACAG GAATGAGTAG AACTATATTT AACAAATGAAA    420
AAAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG                                     455

```

## (2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```
GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG      60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC      120
GGAACCTGTC TGGCTTTTGG CTGTAGCTCC ACATTCTGT GCATTGAGGG GTTAACATTA      180
GGCTGGGAAG ATGACAAAAC TCTCGAG                                         207
```

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

```
GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TAAATATCT GTTACAGGTT TCCAAGGTGG      60
ACTTGAACAG ATGGCCTTAT ATTACAAAA CTTTATATT CTAGTTGTTT TTGTACTTTT      120
TTTGCATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT      180
TTTAGAGGAA ATAGTCAAAC ATGAAGTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA      240
TCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

```
GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTCTCTCC TTCTCCTGGT      60
GGCAGCTCCC AGATGGGTCC TGTCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT      120
GAAGCCTTCG GAGACCCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA      180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC      240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTACCA TATCACTAGA      300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT      360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCCTCCTAC TACTACTCCA TGGACGTCTG      420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG              472
```

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GCTCGGCTCG	CTGCAACCTC	TGCCTCCCAG	GTTTCGAGCGA	TCTTCCTGCC	TCGGTCTCCC	60
AGGTAGCTGG	GACTACTGGC	GTGCGCGACC	ACGCCCAGCT	AATTTTTTGT	ATTTTATAGT	120
GAGACGGGGT	TTCACCATGT	TGGCCAGGAT	GGTCTCAATC	TCTTGACCGC	GTGATCTGCC	180
TGCCTCGGCC	TCCCAAAGTG	CTGGGATTAC	AGGCTTGAGC	CACCGCATCC	AGCCAACATT	240
TTTCAAATAG	AAAATCTGAA	GCTAAATCA	CCCCTAAAGG	ACAAATAACA	GGACTATCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCGGCC	TTCATGGCCT	ACTAGATTAT	GGATTTTTTT	ATTTCAATGG	AAGTGAAGTT	60
CAAAGATGCC	AGAGTGGTAC	AGTTTCAACA	AACTGCTTGG	ATTGTCTTGA	TAGAACAAAT	120
AGTGTGCAGG	CATTTCTTGG	CTTAGAGATG	CTAGCTAAAC	AGTTGGAAGC	TCTTGTTTAA	180
GCTGAAAAGC	CTCAGTTGGT	GACTCGCTTT	CAAGAAGTTT	TTCGGTCAAT	GTGGTCCGTG	240
AATGGTGATT	CAATCAGTAA	GATATATGCA	GGAAACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AGACGTGATG	TGTTGAGAGA	AGAATGTTCT	AGGCAGAGGC	60
AACAGCAGAT	GCAAAGGTCT	GAAGGGGAGA	CAGACCGAGC	TAGAAAAGCA	TGGCACATCA	120
GTGATCTAAG	TTCTGTGGT	TTCTTAAGGT	TGGAACCTAG	GGTGCAAACT	GAGGATGGGC	180
AGATGAGGTG	GAAGAGGAAG	AGCAGACCCA	GGTCACAAAG	ATCTTTTGTG	CTAAGGATTT	240
TTAAGCAGGT	AGGAGGAGAG	AGAATATGAG	CCTTGGGATT	TGAAGTCTG	TGGGTGTACA	300
GAAAAAGAGA	AACTCAACGA	GAGGTTTAGG	TTTAGGGACG	TGGTAGGCTT	TTGCAGTAAG	360
GGACAAGGAC	AGAAGGCTCA	TCTGAGGATG	GGAGGGACAC	TTTAGAGGCA	AATCCATAGG	420
ATGCAGTGGC	TGAACAGAAA	AGGTGAATCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGTCATTAA	TTTAACTTAG	CAAACTCCA	ATAGTGAAG	60
TTAACAGATT	TTGGAACTG	GTTTTAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTCCTTG	TTAGCTATTT	TTACAGCATG	TGCATGTTAG	GTAGTCATCG	180
TGAAAGCAAG	AATCTTAAGT	TAAATACATG	TTTTTTTGT	TTGTTGTTT	TACTGCTGTG	240
CTGTATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCGG	CGAAACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCCCCC	60
GCCAATCCAT	CAGGGCAGCT	CCGACTCCTG	CAGCACCCAC	CGCCAGGAC	GTCAGCTACT	120
CAGGTTTTCT	GGCTGCTGGG	GTTCCGCACG	AATGGGCCCT	TCTTTTGGGA	AAATGCCAGG	180
GAAGGGGAAC	GGCTGGGCTC	GGGCGCCACA	GCTTGTCCT	CCAGCCAGCA	GGCACAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCTGT	GGCCAGCCCC	AGAGAGACGG	GCCCTTTCTT	300
TGGGACCCTG	GCCTCAGAGG	CCTGCGTGTC	ACAGCTCAGG	GTCTGGCTGG	GCAGGGGCAA	360
AACCTGCCTT	ATTGCCAGA	TGTCCAGAA	GTACACAGGA	GCAGACGCAC	CACTTCGATG	420
GCTATTTTAG	GAGGCTGGTG	ACAAGCAAGG	CATGGTGGCA	GGAAGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCCTGCT	CAGTTTCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGCTGTAC	TTTCACAGCC	TTCTCAGACT	TTTCTGAGGA	TGGCCTTACA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTTTC	TGTGGCTGTT	CTCAGAATGC	180
CCTAGTTCAC	TTTCCAGTAA	TACTTTTTTG	GGAACATTTT	GTGTTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TTGTTCTGGC	CCACTCCCTG	ATATTTTCTG	GGTTTGTAC	CTAGTTTCTT	360
TAAAAGTATC	ATCTACATGG	TTTTGGTTTC	ACTATCTATT	CTGTCTTTAT	TGAACACTA	420
GGGGAAATTC	ATTATGCCAA	TCTCACACAT	TGTGTGATTC	CATTAGGCCA	TGAAGGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

GAATTCGGCC	AAAGAGGCCT	AGGCAAAATG	AAAATACTTG	TGGCATTCT	GGTGGTGCTG	60
ACCATCTTTG	GGATACAATC	TCATGGATAC	GAGGTTTTTA	ACATCATCAG	CCCAAGCAAC	120
AATGGTGGCA	ATGTTCAAGG	GACAGTGACA	ATTGATAATG	AAAAAATAC	CGCCATCATT	180
AACATCCATG	CAGGATCATG	CTCTTCTACC	ACAATTTTTG	ACTATAAACA	TGGCTACATT	240
GCATCCAGGG	TGCTCTCCCG	AAGAGCCTGC	TTTATCCTGA	AGATGGACCA	TCAGAACATC	300
CCTCCTCTGA	ACAATCTCCA	ATGGTACATC	TATGAGAAAC	AGGCTCTGGA	CAACATGTTT	360
TCCAGCAAAT	ACACCTGGGT	CAAGTACAAC	CCTCTGGAGT	CTCTGATCAA	AGACGTGGAT	420
TGGTTCCTGC	TTGGGTCACC	CATTGAGAAA	CTCTGCAAAC	ATATCCCTTT	GTATAAGGGG	480
GAAGTGGTTG	AAAACACACA	TAATGTCGGT	GCTGGAGGCT	GTGCAAAGGC	TGCACTCGAG	540

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 289 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

GAATTCGGCC	TTCATGGCCT	AGCCAGTCTC	AGCACTTAAA	CAACCAGGTG	TTGAAGGACT	60
ATGTTCCAAA	GAACAGAAGA	GAGTATGGTT	TGCAGATGGT	ATATTGCCCA	ATGGTGAAGT	120
TGCAGATACA	ACAAAATTAT	CATCTGGAAG	TAAAAGATGT	TCTGAAGACT	TTAGTCTCT	180
CTCACCTGAT	GTGCCTATGG	TAAGGAATTC	AAAGAATACT	TAATTGACTA	AACAAAATTT	240
TATTTCTGAG	ATAATTCCTG	GTGTGATTAT	TAGAGTGCTT	TTTCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 418 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

GAATTCGGCC	TTCATGGCCT	AGAGCTTGGG	AGGTTGAGGC	TGCAGTGAGC	TATGAGCTGC	60
ACCACTGTAC	TCCAGCCTGG	GTGACAGGGC	AAGACTCTGT	CTCAAAAAC	AAAAACAACA	120
ACAAAAACTT	TATTCCTAAA	AAGTGCTGAC	CCAGAGATAA	GAAGCAAGCA	CATGGTTGGT	180
AAAATGACAT	CAGTGAGCTT	GCTTTATGCA	GGGTTGCCCC	AAACCTTCAA	TTTGTA AAC	240
TCAAAATATC	TGGAAAGCTT	GGTGAGGCGA	GGCGGGACTG	TAACTCAGCA	CTACCCGAG	300
GGTGAGACCC	TTAGGCGAGC	GGGTGCTACA	CTGAACAAAG	CGGTGAACAG	CCCCCTCGT	360
AGAGGGGGTT	CTTGGCAGAT	GACGCCAGCA	GCTGACAAAC	AGGCAAGTGC	AACTCGAG	418

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs



(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTCGGCC	TTCATGGCCT	AGATTTGTAA	AAGATTTTCC	TAGATTTACT	GTGTTCTGGA	60
TCTAGCTTGA	ACGTGAATGT	TTGTATAGTA	CGTTTTCTTA	ATATTTTTTA	GTATTCATAG	120
TATATAATCA	TACTAAACTT	GAGAACTGG	AAGAATCAAG	TCTTCCTCAG	TTCTGTTTAG	180
ACTTTCTAGT	TTTTTTTAA	GATACTTCCA	TATCTTCTGT	AAGCTACACA	GTGAGCTTCA	240
TTTTTGCACA	GTTATAATAC	ACTCTCGAAT	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 379 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC	TTCATGGCCT	AGGGTTCGAT	GATAAGCACA	GGCGGCAGCT	GGATTGCAAG	60
TGGAGTGGTA	ATGGCCAGAA	CAGCCTCTTT	CTGTTTTGCA	TTAGTCGAG	GATCCAACTG	120
TTCATCCCAT	TGTCTGTTAG	GACTCCATGG	TATGGTGGA	GTCACTACTGA	TGTCTGGAAA	180
CAAAACCCCA	TTGTCTTGA	TCCTGTCTAG	TGCATAGTGC	ATTTCACAGA	GGGGTAATCG	240
ATTTAATTGA	AACTGAAGTT	CAACCTGTGT	GTACACAGTCA	GGCCGAAGAT	TAAGTTCTTC	300
ACAGCATTCC	CTAGATAGCC	TTAAAAATAT	ATATTCCTTT	GTTTTTCTT	CAATAGTAGC	360
TTCCTAGACC	TGCCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 417 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC	TTCATGGCCT	AAGAGAAAGA	GAGTGAGAGA	GAGAGAGAAA	GAGAGAGAGA	60
GATGCTGTTG	AATCAGAAAC	AGATCAACAG	CCCAAAGATT	TTCCTGTCCC	TGGAGTGCCA	120
GCCCCAGGAA	GCTCCAGGGC	TGAGTGGTCA	GGAGCCAGTT	TCTCCAGCCC	CTCCTCCCCA	180
CAACCCCTAG	TGGGGAGGGG	CAGCTGTCCA	TTTGCCCAAA	GTATTAATGC	AACTGAAGCT	240
GTGATATTTC	CAACGACTGT	AGGAGGAAAA	ATTAAGGGGA	GAGAGGAAAA	CAAAACCAAC	300
CAACCCCTAA	AATCATTTTC	TTATTGTACA	TAACGACCTC	ATTCTCCTGT	ATATGCGGAA	360
GATATAACCT	TATATTGGT	AAGTGTTTCT	TGTGCTATTT	TATCACGCGA	CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 154 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTTCAACAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTT GTATTTTAT TTAAAAGTAT	120
TAAAATCCCA ACAGTAACAG CAATACAACG CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 252 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAAT AAAGTGTAA ATTTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTGAT TTAGATTGG GGCCATTAAA TTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTTCTCAAT TTCTGGTGAT ATGGTTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCCA CGTGTCAACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 251 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTAGTTC TCAGAATTCT TCATATATTT TGCGAGCAGT	60
TTTTCCATCA GATTATTTTG TAAATATTTT CTCCCAGTCT GTGACTTGCT TTTTCCATTG	120
TCCTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTTT AATGAGGCTC AACTTAATTT	180
TTTTTTCATT AGTAGATTGT GCTTTTGTTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 534 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```

GAATTCGGCC TTCATGGCCT AGAAGGCTTC TGAATAATTT CTCAAAAC TA NCTTTCCATT      60
TNAGTACACG ATTTGATAAA CATAGCACAT TAGATAGGTA TTTAGCAATT TCTTCTACCA      120
ACTACACTTT GCCCTCACTA AGGGTTAGAG TATGATTTGA AACAAATTTCT ACATATAAAG      180
CATCTTTAAA TAAGTTTGT GTTCACTGAA CTGAGACTTC TTTCACTTAT GTACCTATGG      240
AAGTTAATCT GAGCATACAC ATATATACAT ACTTGCATAC ATATGTGTAC ATATGTTTTT      300
TAAGTAAGTN ACTTTTACCA TTAGAATAAA CCTAGACACT ACAGGGACAA CTCTGGGGAA      360
CAGGGCGGTC TGCCTTAACA ACCCTTCTCT AGGTTGAGGA AGGCAGGTAT AGTTCAGTGA      420
AGGATGTGAT GAGGCTGTAG TAAGTCTTCT CATCATCTGT TAATCCTGCG TTGCCTGGTC      480
TCACCACCAC AGCTACGTGC ACATCTGCTT CCTCAGCAGC ACTGGCCTCT CGAG          534

```

## (2) INFORMATION FOR SEQ ID NO:980:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

```

GCTCGAGTGT CGTGCTATCT CTAAATGTG ATCTACTAAGA ACCGCTGCGG AAACAGTAAC      60
TGTTCTTTT ATTTTGAACA TTTAGTTTG TAATTATCC AATTCTTTCT TCTTTTGATA      120
AGTCTCCATT CTCTTTACTT CACGGGTATT TTCAAATTCA TTAATCATTT TATCACAGTG      180
CCACTTGTTA GACCCTAATG AACGATGTCA CCCTCTTATC AAA          223

```

## (2) INFORMATION FOR SEQ ID NO:981:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```

GAATTCGGCC TTCATGGCCT AATTACTTGA CCCGTAATAG GGTGTGGCC GTTTTCTGAT      60
GCCTAAGTAT TATACAGAGC CCACAATGGC CAGTTTACTA CCAGAAAGGG CTTAGTAAG      120
ATATTCTTGG ACTTGATACT TTCTTCAGAT CCTCTTGTG CCAAGATAAT TTATCCAGTC      180
ATTGGGAATA GTAAGTTTCT GTGTAACCCA TCTCAATTAT AGAAGCAAGT TCAGCTTTAT      240
GTATTTGTAT GGGGAGTTGA AGATTCAGAT AGAGGTATTA AGATGTGTGG CATTTACTTA      300
AACCATCACA TTTTCTTCTT TCTACGCCCC CTGCTGTGTA AAACACCTGG GAAGTTCAC      360
TGGTGTGATC CATCCTGATG CTTGAGACCA CCTCCCTTC TTCACAGACC GTGTCACTTT      420
GCCTGTGGGT GGGGGCTAGC CAGCCACCAC CCTCTTTTCT GTGCTGCCAG CCAATCTCGA      480
G          481

```

## (2) INFORMATION FOR SEQ ID NO:982:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

```

TCCGTGTCCC CTCCTCCCTC TGCCCCCAGT GTTCTTCTG ATTTTTTTTT CCCCTTTCCC      60
TCCCTCCCTC TCCGCATTCT TCCCTTGTTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC      120
CTGCCTTCAT GGATCACCAG CTCACGTCAT GTTGCCCTTCT CTTTTCTTTG TGTGTGTGTT      180
TATTTAAGTT ATTTTCTTTC CTCCTCTCCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT      240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTGCAAAC AGCCGGACTC GAG                293

```

## (2) INFORMATION FOR SEQ ID NO:983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```

GGTGAGGATG GTGGCTGTGG TTGTGTTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG      60
GATGGTGACT CTGATGCTAA TGTGTTGTTG GTGTATGGAG GCAGCTGTGG CAAGGATGGT      120
GACCTTGGTG GAGAAGGTGG CCATGTTGGG GCTAGTGGCT GTGGTTGTGG TGATGGCCAT      180
GGTGAGGATG GTGTTAAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC      240
TGTGATGGTA ATGTTGGCTG TGGTGATGAA GGTAGTTAT GGTGAGGATG ATGACTATGG      300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG                334

```

## (2) INFORMATION FOR SEQ ID NO:984:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```

GAATTCGGCC TTCATGGCCT AGGGAAAGAG TAGGGGTGGA GGGGTAGGAG GATTTACTCT      60
TCCAGCGAGA GCTACGCGCA TCCCATCCTC CCCCTCCCCC CTACCCGGGC TCCGGCNTGG      120
AGGCGGGGCG TGGCCGGCCT GCTTGGGAG GGGAGGGGCT TCCCTTACAG TGCTGGGCTC      180
TGCCAGGACG GCTGTGGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAGTTC      240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG      300
CCACTATCAC GAAGAAACAG CAGGCTCGGG GCACGAGACG AACTGGAGAC CGCGCTGCCT      360
AGCTGGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGCGCC TTAAGATAAC CCTGTAGCAG      420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCAG GGAACAAGCG GCTGTAGTAG TCTGTGGGCG      480
GACTGGAGTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTTTAACCTC      540
TGAATATGCA ATTCTGAAAC CTCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT      600
CCACTCTCCT TCCTCCCGCC GTGGTCTCGA G                631

```

## (2) INFORMATION FOR SEQ ID NO:985:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAAATGA	GTTGATAGAT	60
TATCGCTTTT	TTTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TCCCCAGAAA	AGTTTTTGTC	AAAAATTGTA	TTTACATAAC	CTCAGAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GAGCATACCA	AGCAGCCTGT	ATACCATTTC	TAAACCAACT	240
ACTCCCCTGC	AAGATAGATC	TCTTTTTTAT	AGACAGAAAA	TAAATTCAAA	GAGGTTTGTT	300
ACTTGCCCAA	GGCCACCACT	CGAG				324

## (2) INFORMATION FOR SEQ ID NO:986:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCT	TTCATGGCCT	AAAATGTTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTTA	60
AAACTTTTTTA	TTATGGAAAT	CTAAAAAAA	TTCACCAAAT	GAGAGAGAAC	ATTACAATGA	120
ACCACCATAT	ACCCATCACC	CATTTTCAAC	AATTATCAAC	ACATGGCCTA	TCTGTGTTCC	180
TCCATACCTT	CAGACACCCT	CCGTCCACAA	ACTGGGTTAT	TCTGAAGCAA	GCCTTCGAG	239

## (2) INFORMATION FOR SEQ ID NO:987:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCAG	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGCA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCAG	GAAGTTCCGG	CCAACCTTTAA	120
CTTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGCAA	GNGACTCCNA	180
AGCCCAACCC	TGTGGTGGGT	GAATGGGAAA	GGGAAAGAAT	TAATGTGGAA	TTTCAGAGAA	240
CTGAGTGAAA	ACAGCCAGCA	NGCAGCCAAC	TTCCTCTCGG	GAGCCTGTGG	CTTGACGCGT	300
GGGGATCGTG	TGGCAGTGAT	GCTGCCCNGA	ANGCCTGAGT	GGTGGCTGGN	GATCCTGGGC	360
TGCATTTCGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGACA	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGCT	GAACCTCAAG	AAACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACTGTGTGG	AGACTGGAAG	CCAGGAAGCA	TCTGCCATCT	ACTTCACTAG	TGGGACCAGT	660
GTCCTTCCCA	AGATGGCAGA	ACATTCCTAC	TCGAG			695

## (2) INFORMATION FOR SEQ ID NO:988:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

GAATTCGGCC	TTCATGGCCT	ACTCAGAACA	ATCACTGCAT	ATCCCATCTT	AAAGGCAAAA	60
CCCAAACCAG	AAAAACCCCA	CTCAGGTCTT	GCTGACCCAA	CACTACAGTC	ACTGTATTG	120
AGACCCCTTT	TTCTTGAAAA	AGGGACTTCA	CTTTTTTGAG	CAGCATTCTA	TGTTCTTTC	180
CACACAGCAA	TTGACGCATC	TCACGGCACT	GCTCTCTGCT	GGGCAGAGAG	CAACACAGA	240
CAGCCACCAT	CCCCATATTC	GTAAGTAAGAG	AAACTCCAGA	AACGCAGCCA	CCGTCCCCT	300
AGACCTGCCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

GAATTCGGCC	AAAGAGGCCT	AGGAGCTCCC	CCATGGATCA	TGGCGTTAAT	GTTTACAGGA	60
CATTTACTAT	TCTTAGCATT	ATTGATGTTT	GCTTCTCTA	CTTTTGAGGA	ATCTGTGAGC	120
AATTATCCG	AATGGGCAGT	TTTCACAGAT	GATATAGATC	AGTTTAAAC	ACAGAAAGTG	180
CAAGATTCA	GACCCAACCA	AAAGCTGAAG	AAAAGTATGC	TTCATCCAAG	TTTATATTTT	240
GATGCTGGAG	AAATCCAAGC	AATGAGACAA	AAGTCTCGTG	CAAGCCATT	GCATCTTTT	300
AGAGCTATCA	GAAGTGCAGT	GACAGTTATG	CTGTCCAACC	CAACATACTA	CCTACCTCCA	360
CCAAAGCATG	CTGATTTTGC	TGCCAAGTGG	AATGAAATTT	ATGGTAACAA	TCTGCCTCCT	420
TTAGCATTGT	ACTGTTTGTT	ATGCCCAGAA	GACAAAGTTG	CCTTTGAATT	TGTCTTGGAA	480
TATATGGACA	GGATGGTTGG	CTACAAAGAC	TGGCTAGTAG	AGAATGCACC	AGGAGATGAG	540
GTTCCAATTG	GCCATTCCCT	AACAGGTTTT	GCCACTGCCT	TTGACTTTTT	ATATAACTTA	600
TTAGATAATC	ATCGAAGACA	AAAATACCTG	GAAAAAATAT	GGGTTATTAC	TGAGGAAATG	660
TACGAGTATT	CCATGGTCCG	TCTCGAG				687

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

GAATTCGGCC	AAAGAAGGCC	TAGAGCCCTT	CTGTCCCTTC	TACCATGTGT	GGATGCAGTG	60
AGAAGGCACC	GTATCTCTGA	AGCAGAGAGC	CCGCCCTGGA	CACTGGATCT	GCTGGCACCT	120
TGATCTTGG	CTTCCAGCC	TCTAGAAGTG	TGAGAAATAA	TTTTTTGTTG	TTTACAAATT	180
ACCCAGGCTA	AGGTGTTTCA	TTGTAACCTG	AATGGACCAA	GCTGGTGTTG	CCCTGTTGGA	240
AAACTGGCAG	TATCTACCAA	AAGCCGAACA	TACGTATAAA	CTGATCCAGC	AGTTCCACTC	300
CTGGGTATGT	ACACCACAGA	AAGCTATGTC	CACCGAGACA	TGGCAAGAA	TGTTTCTAAC	360
CACACGCTGA	CTGTAGCCCC	AAACCTGAAA	CAACCCAAAT	GTCCATCCAC	CAACCCAAAT	420
GTCCATCCAC	AGTTGAAGCT	ACAGTGAAGT	CACAGGGTCG	AATACTACTG	CACAGCAACG	480
AATATGAATG	AAAATATCGC	TATGCACAGC	AACATGGATA	AATTTACAG	ACATGAGGTC	540
AAGCAAAAGA	GGTCAGAGTC	CTCATCATCA	AGAGAGAATT	CATTGTATGA	TTCTCTTCCT	600
ACAAAAAGTA	CAGAAATAAG	CAAACTGAT	CCATGGTGTT	AGAAGCCAGG	GGAACAGTTA	660

ACAAGGGAGC ACTCGAG

677

## (2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC AAAGAGGCCT AAGAAGCTGC TTCCTCCTGG GAACAACCGC CTCCCGCTCC      60
TAGCAGGTTG CTAAGTCCCC GAACCCGCGC TGCAGGGAAC AGCGGGGCAA ACAAACCAA      120
TAGAGCCATG GCGACTCCCT CTGCTGCCTT CGAGGCCCTT ATGAATGGTG TGACAAGCTG      180
GGATGTACCC GAAGATGCTG TTCCATGTGA ACTGCTTCTT ATTGGAGAGG CTCATTTC      240
TGTGATGGTG AATGACATGG GCCAGGTCCT CATTGCTGCC TCCTCCTATG GCCGTGGCCG      300
CCTGGTGGTC GTGTCCCATG AGGACTACTT GGTGGAAGCC CAGCTCACGC CCTTCTCCT      360
GAACGCAGTG GGGTGGCTTT GCTCTTCCCC TGGGGCTCCC ATTGGTGATC ACCCATCCCT      420
GGCACCTTTG GCCAAAATCC TCGAG                                         445

```

## (2) INFORMATION FOR SEQ ID NO:992:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT ACTGTGATTT AAAATCTTGC TGTGTGGCTT GGGTTGTTTG      60
TGTGTTTCC AAACCCTGAA TCTTTTGGGG TCTTCAATTT GTGGGCATGT CAGTGGAAT      120
TCTAAGCTTT GTTTAATGGT GTGTGTGTGT CTGTCTGTCT CTGTGTGAGT GTGTTTAGAA      180
ATTGGCTTCT CTGGGTTCTT CGCTCGTCTT CTGGAAGGTG GGGTTATAGA CATGCTGGTG      240
AATTCTGAAT GTTTTATAAA TTAGACTATT AACGGAGTTA AATTGAAGAA ACCTTCTGTC      300
ATAAGACCTT CCAGGAATTC CATTCCAAAT GAGGAAATGC ATAAAGACTT GTCCACTTGG      360
CAAACATTGG GTGTTTGGGA GGTGGACTCG AG                                         392

```

## (2) INFORMATION FOR SEQ ID NO:993:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGCGGCTCC CTTGGTCCTG GTGCTGGTGG TGGCTGTGAC      60
AGTGCGGGCG GCCTTGTTCC GCTCCAGTCT GCGCGAGTTC ATTTCCGAGC GGGTGGAGGT      120
GGTGTCCCA CTGAGCTCTT GGAAGAGAGT GGTGAAGGC CTTTCACTGT TGGACTTGGG      180
AGTATCTCCG TATTCTGGAG CAGTATTCA TGAACCTCA TTAATAATAT ACCTCTTTCA      240

```

TTTCCTAATT GACTATGCTG AATTGGTGT TATGATAACT GATGCACTCA CTGCTATTGC 300  
CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:994:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60  
GCTTTCAGTT GTCATTCTGA TGTCTGCAA CATATCATCG TGTGTTGATT TCGAG 115

(2) INFORMATION FOR SEQ ID NO:995:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 633 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60  
CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120  
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180  
TCACCCCTTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240  
GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTCCTTTT 300  
CCTTCTGGTC ATTANAACG CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCAAT 360  
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420  
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480  
CAACACCGCC TGTTCTCTCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC 540  
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GGCGTTCCAC CAATACTCGC CCACCTTGCT 600  
CAGGTTCAAC AAAACGCACT TCCCGGGCTC GAG 633

(2) INFORMATION FOR SEQ ID NO:996:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT 60  
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATCCGCA AGTCAACATC 120  
ATGACAAAAA TGGATCTGCT GAGTAAAAAA GCAAAAAAGG AAATTGAGAA ATTTTGTAGT 180  
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGACT TAAGAAGCAA AAAATTCAAG 240  
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTCG ATTTTACCT 300



TACGATCAGT	CAGATGAAGA	AAGCATGAAC	ATTGTATTGC	AGCATATTGA	TTTTGCCATT	360
CAATATGGAG	AAGACCTAGA	ATTTAAAGAA	CCAAAGGAAC	GTGAAGATGA	GTCTTCCTCT	420
ATGTTTGACG	AATATTTTCA	AGAATGCCAG	GATGTACTCG	AG		462

## (2) INFORMATION FOR SEQ ID NO:997:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC	AAAGAGGCCT	AGCTGGTAAC	ACATGTGAAC	TCAGGTAAAG	TCATCGAGCA	60
TTTTACTGAC	TCTATTCCTC	AATAAAGTAC	TGGGAAAAAA	CTCATAAGAA	TGACAAAAAC	120
AACATACTCA	GGTATGCGAG	CAGAAGCCTC	TGACACAGCT	TGTCTTCGGG	GCTTAACTAA	180
ATGATCTATT	TTAATGAGGG	AATCCGTGGA	AAGGCATGCG	TTTTCAGGCT	CATTTTCTGC	240
TTCCGATGCTT	TGTCCAGAGA	GTTGGAATCT	CAACGTGTGT	TTCATGTGAG	GCTCCTTAAG	300
AGGGTGACAT	TCAACATCCC	AAAACCTGGC	ATAATCCCCC	CTACCTCTGG	GCAAAAATGT	360
GATGGAGACT	TTTGGATCC	CATGGCTTTC	CAGCAGACCA	GAAATAGGAG	AACATCTGAA	420
TGCTGCATAG	GTAGCTCTAA	AAACATCTCC	ACTTTCATCA	ACTCCCTTGA	CATAAGGTGG	480
CACCACAGAC	GTGAAATGGC	ATCTGTCATC	TTTAGCGCCA	CCTTATGTCA	AGGGAGTTGA	540
TTCTCGAG						548

## (2) INFORMATION FOR SEQ ID NO:998:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC	AAAGAGGCCT	AGTTTCCCTT	TCTGTATTTT	ACTACTAAAT	TAGAAAGCAC	60
TGTTATGTGA	ATAAGTTACT	ACATTGCTTT	GGTTGAGTAA	AAACAAGAGT	ATATATTTTT	120
CTTGTTTCTT	ATTTNCTAAA	CCCTTAACTC	CTGCTGAGGT	CATAACAACC	TCAGTCTAAG	180
CTCTGTGTCC	ATCATACTGT	TAACTTAAAC	AAATGGGTGG	TGGGGGTGGG	AAGGGTAATA	240
CAGTCCTGCC	ATTGCCTACC	AGTAGGAGAG	TCCAAACAGA	ACACTCTTTT	GAGTAGCAAT	300
TATTTAATTT	GCCCAGTCAA	GGCACCGTGT	TTATATACTA	TTTCACATTG	AATTTGATTA	360
TGCCCTACAG	ACCTGGCTGG	TCAAGGATTT	GATATACACA	TATTGGCTTG	GGATTCGAGC	420
TTTCTTTTTT	ATTTAAATAA	AAATTTATAT	ATATATTATA	TATATACATA	TATACATAGC	480
TATATCTGTA	TATATATTGG	GTATGTTTTA	AGGATTTTTT	CGCATGAGCG	CAGCTGTTGC	540
GATAAATTGA	CCGATTGGGA	GGTATTCTCG	AG			572

## (2) INFORMATION FOR SEQ ID NO:999:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGAGC	ACGTCTTTTC	CTTGAGTGTA	ATTTACTAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGGAATTG	GCCCTTCTTT	GAAGGCAGGT	120
GAGAATCTAG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCCAGCAC	ACCAGGGTTG	CAGCCTGCGC	AAGACCTTCC	ATAGCTATTT	CTGCCGGCTT	240
GCTTCTTCC	CTTCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACGGAA	ACCGGCTCTG	300
TCCTCCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCGGCAGTG	360
GGGGTCACCC	AGGCGTGAAG	ATGGGTTTCC	CTGGGGATAT	CCTGCCTCCT	GCCAATCACA	420
GCGTCTCTCT	GGGAATCCTG	GGGGTGCCTG	GAGGCTGAGG	CCCAGGGAAG	CCCCCAAACC	480
CCAGTGCTGC	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGTCTGG	GGTTCTTTTA	540
TCTCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

## (2) INFORMATION FOR SEQ ID NO:1000:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCAATTCGGA	ATAAACTGCT	TCTGATCACA	AGAAAACACA	ACAAGCCAAG	120
CGGGGTCACC	AGCACCTCAT	TGTTATCTCC	CCTGTCTGAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCATGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTG	ATGTGGTGAA	300
TGAGAGCACA	GGAGAAGCCT	TCAGGCTGCA	CCACGTGGAG	GCCAACAGGG	TTAATTTTGT	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGGTTTG	CTGTTGTGTT	ACAACCTACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCTTTAA	TGGTGGCTCT	TTTTTGTTTC	AACCTTCTGC	480
GTCAGATTTT	CAGTTCTGTT	GGAACCAAGG	TCCCTATGCA	ATTGTCTGTG	CTTTCCCGTA	540
TCTCCTGGCC	TTCACCACCG	AATCGAG				568

## (2) INFORMATION FOR SEQ ID NO:1001:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGCAAT	TGTTCCAAGG	CTTTTGTTC	60
CATCATCACA	AATATTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAAG	120
TAATATGTAA	AGAACTTATG	ACTTTTCGCAT	CCTCTAGCAA	ACAGTAAGCT	GCCTGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAACCT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGACTGGA	AAAGCATCTT	GGATGTTGAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTGCAATA	GAGGCCTTCC	TCATCCAGTT	CATGGCCACA	TCCAAAGGTG	360
TAACCTCTGAG	CAGTGTCTCTG	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCAT	CGAGGCTCAA	GCTGTGTCGA	TCAGTGGAGG	TCTTTGGTTT	CCGACATATA	480
GTCTGTGGAA	GAGAATCAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

## (2) INFORMATION FOR SEQ ID NO:1002:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC AAAGAGGCCT AATTCCACTT ACGAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCCATCT TGCCTTGAAA GTCCCTGTTG GATGGAACAG TGGCATT TTC CTTCCTTTTC      120
TCAGGACTGC AAACAGACCT AATATTGGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTTCATCAGC GGTCAACCGG CAGCTGCTCG      300
CCTCCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTG AAAATTTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTGCAG CAGGGAGGAG ATTCACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCCAGAGT CCACTGT CAT TCAGGATTG      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAT GAAAGGAGGT GTTTTGTGTT TGTGTTGTT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG          592

```

## (2) INFORMATION FOR SEQ ID NO:1003:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTGGGGGG CGAACACGCC GCGTCCCTCG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGAAGT TCTGTCACTG GATCTGGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTT ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAAACAGGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAAACTAGCT GGTTTGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCACCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTA CTG GTTTCTCTG TATCTATTCA CAGGCGAACT CGAG          584

```

## (2) INFORMATION FOR SEQ ID NO:1004:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GAATTCGGCC TTCATGGCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

```

```

ACTCCAAATG ATGACATGGT CTTATTTTAT CTATTAACCA TAAGCTTACA GATTCTAGTG      120
AAGAAAAAAC TTTAGGAGGC TACATGGTCT ATTGGAGAGT GTAGGCTCTG CAGTCAGAAG      180
ATCCCTACCC AGGCTTCTGT CTTTCTCAGT AAGACTTGGG ACCACAGCAA GGTCCGCAAT      240
CTCCTGAGGC TCTGTTTTCT ATGGTTGGGA TAACATGGTA AGTTATTTTC TTCTAAGTAG      300
TCACACATGG AAATCTTATC TAAATTTTA TACCATTAAC TTTTATTTC CTTATTAAC      360
CATACCATTA ATACTTTACT TTAGCTATGT TTGGTATGCA TGAGTTGATG AGTGATTAGA      420
GTACTATGAG CGATCTCGAG                                         440

```

## (2) INFORMATION FOR SEQ ID NO:1005:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTGC AGATTCTGGC CAACATGGAC AGCCAGCTAA      60
AAGAGCTACA GAGTCAGCAT ACCCATTTGT CCCAGGACCT GGCTATGAAG GATGAGTTAC      120
TCTGCCAGCT TACCCAGAGC AATGAGGAGC AGGCTGCTCA ATGGCAAAAG GAAGAGATGG      180
CACTAAAACA CATGCAGGCA GAACTGCAGC AGCAACAAGC TGTCCTGGCC AAAGAGGTGC      240
GGGACCTGAA AGAGACCTTG GAGTTTGCAG ACCAGGAGAA TCAGGTTGCT CACCTGGAGC      300
TGGGTCAGGT TGAGTGTCAA TTGAAAACCA CACTGGAAGT GCTCCGGGAG CGCAGCTTGC      360
AGTGTGAGAA CCTCAAGGAC ACTGTAGAGA ACCTAACGGC TAAACTGGCC AGCACCATAG      420
CTCGAG                                         426

```

## (2) INFORMATION FOR SEQ ID NO:1006:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

GAATTCGGCC TTCATGGCCT AGAGTAGCCA GGGAGCTGGA AGTTCCACAG ATTGGTTTTA      60
ATAAACAAAC TCCCTCAATG ATGAGTGGTC TTTTGAAGAG CATGGTTAGA ACTTGGGATT      120
GTGCTTCTCA TGA CTACAAA TGTACTTGTA GCTTAGGTGC AAAAGGGTAG GTCAGTGGGT      180
AGCTAACTAC TGAGGATTGA TTTTCCTGAC GCTGGTGTTT AAGTGTCAAC CAGAACTGGC      240
ATATAAAGTG GCTCATTAC CCAAGTATCT TCCTTTCCTT TTTACAAAAT CCTTGGCTGT      300
TGTGGGGCCT ACATCTCTC ATGATTATTA TTGCATCTGG TGTCATGTTT TTCCAGCTGG      360
TGTACTGCTT CCCTGTAGGC TTCTTGATGT TCACTCCTCG AG                                         402

```

## (2) INFORMATION FOR SEQ ID NO:1007:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

```

GAATTCGGCC TTCATGGCCT ACTGGTGCCA CGGGAGGCAG ACACCAAGTT CTGGGGTCTC      60
CAGCTGCAGT GGGTGGCCGC CAATTGCTTC TCTCTGTCCA GACTAATGAG AACATGGAGA      120
TCACCACTGC ACTGCAGTTG GAATAGCAGC TAAAGAGGGA GCTGGGAAAG AAGCTGGGCA      180
AGCTAAAGGA CATGGTAACC CTGCCCCATC CAAGAAGAGC TGGGAAGGCG GCACCAAGCCT      240
CTGGGGAGGG GAGGTGTGAA GCCAGAGGCA GCTCCAGCCT GGGGGACAGG TGACCCAGC      300
ACCCCTCAGG GCAGTCCTGT GACTGTTTCT TGCTTCCCGC CCTCTGACAT TTAGTGGTGG      360
GTTCGTCTT CCTAGGTCTG GACATCATCA TCCAGCTGG AGTCATGGAG CCTCCCAAAC      420
ATAGGGAAAG AGATGGTGGT ATAAGAGGCT CTCGAG                                456

```

## (2) INFORMATION FOR SEQ ID NO:1008:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 564 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

```

GAATTCGGCC AAAGAGGCCT AGGATGGCTG TGTTTGACGG GTGTTGCTCG TGACAGTTGG      60
GGTCCTCCTC AGCATCAGTC TTGACATGGC TGCAACTGGG GGGGTCTCG GGATCCTCCC      120
GGAATCTCTT CCTCAGCATT CGCTCATGAT AAGGTTTCAG GTGTCTTGAT GGTTCACTCC      180
TGGAGAAACA TAAGCATAAC CTCTACCCCA AGTTATTATT TTACCTATTT CCCAACTTTC      240
TGTTATCAGG TCTCTCCACC AAACAGTTG TTCTGCTTCT GTCTTTGCG CTGGTTTCTG      300
TAGATGCTGT TCAGCTGCTG ATAAGATCCG GCCTTTAGGC AGGCTCAAAA AATTTAAAGT      360
TAATAATGCG ATTCAATTGC TTATGGGGTG TCCTGTAGTA CTGTTTTTCC CCCTTTTGCT      420
TCTGCAACTG CTGTTTCAGG GAGAGATTCA TTCTTTCCAC TATGGCNTGT CCTTCAGAAT      480
TATATGGGAT ATCAGTAATG TGTTTAATAT TCCGTATAGA GAAAAATTTA GCTAGAGCTT      540
GAGAATTAGG TTCCAATCCT CGAG                                564

```

## (2) INFORMATION FOR SEQ ID NO:1009:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 661 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

```

GAATTCGGCC AAAGAGGCCT AGAAAAAGAT GTCATTCCGT AAAGTAAACA TCATCATCTT      60
GGTCCTGGCT GTTGCTCTCT TCTTACTGGT TTTGCACCAT AACTTCCTCA GCTTGAGCAG      120
TTTGTTAAGG AATGAGGTTA CAGATTCAGG AATTGTAGGG CCTCAACCTA TAGACTTTGT      180
CCCAATGCT CTCCGACATG CAGTAGATGG GAGACAAGAG GAGATTCTCG TGGTCATCGC      240
TGCACTGAA GACAGGCTTG GGGGGGCCAT TGCAGCTATA AACAGCATTG AGCACAACAC      300
TCGCTCCAAT GTGATTTTCT ACATTGTTAC TCTCAACAAT ACAGCAGACC ATCTCCGCTC      360
CTGGCTCAAC AGTGATTCCC TGAAAAGCAT CAGATACAAA ATTGTCAATT TTGACCCTAA      420
ACTTTTGGAA GGAAAAGTAA AGGAGGATCC TGACCAGGGG GAATCCATGA AACCTTTAAC      480
CTTTGCAAGG TTCTACTTGC CAATTCTGGT TCCAGCGCA AAGAAGGCCA TATACATGGA      540
TGATGATGTA ATTGTGCAAG GTGATATTCT TGCCCTTTAC AATACAGCAC TGAAGCCAGG      600
ACATGCAGCT GCATTTTCAG AAGATTGTGA TTCAGCCTCT ACTAAAGTTG TCGATCTCGA      660
G                                661

```

## (2) INFORMATION FOR SEQ ID NO:1010:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 316 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```
GAATTCGGCC TTCATGGCCT AGGAAAGATT TGA CTGCTTC TCTCATGCAG GGAATAAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATT      120
ATTTGCACCC AGTTCTGTTC TACTCAGCCT GACGTTTTAT CATCTTTTGG AAAAGTGGCG      180
TGAAGTGGTG TGGAAACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTCC CTTCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG                                     316
```

(2) INFORMATION FOR SEQ ID NO:1011:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```
GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGATGTT      60
AGTGTAGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGGTA GATTAGTTCA GGAAGAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTCATA      180
GAGTCTCACC ATTGTTTAAG ATGTTTAAAT TTTTAAATAC GAATATATTC TCACACCCCT      240
CGAG                                     244
```

(2) INFORMATION FOR SEQ ID NO:1012:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 355 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```
GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAACTG      120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAAATCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG          355
```

(2) INFORMATION FOR SEQ ID NO:1013:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAATT	TATTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGGTNATAT	GACATGGCAA	180
GTCATAGAAT	GAAGAAGCGT	ATTCCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGCTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAATTTAAT	TTGGATCTTG	AAGATCTGGT	CCAATTCCAA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTCTTA	TTTTCTGCTA	AATTAGAAAG	60
AAATTTGCTG	TTTCAAAAT	ACTCAAGCTG	TTCAGTTCTT	CAACAAAAG	TAGGTGACTG	120
AAACTGTAT	GTTAACTAT	GCTTAAGTTA	ATATTTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCCACA	CCAGGCATTG	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCCTTCAAG	AGGCTACTGA	GAATGAAAAC	300
TCAAATCTG	CACAAATAGG	GGTGGTGAA	GGAGAGAAAG	AAAACCCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGT	ACTATTATTG	GAAGCATGCC	TTCCCTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAGGAATC	TTTCAAAATG	GGATTTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

```

CAGAATGGGA CTCCAAGCCT GNCTCCTAGG GCTCTTTGCC CTCATCCTCT CTGGCAAATG      60
CAGTTACAGC CCGGAGCCCG ACCAGCGGAG GACGCTGCCC CCAGGCTGGG TGTCCCTGGG      120
CCGTGCGGAC CCTGAGGAAG AGCTGAGTCT CACCTTTGCC CTGAGACAGC AGAATGTGGA      180
AAGACTCTCG GAGCTGGTGC AGGCTGTGTC GGATCCCAGC TCTCCTCAAT ACGGAAAATA      240
CCTGACCCTA GAGAATGTGG CTGATCTGGT GAGGCCATCC CCACTGACCC TCCACACGCT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

```

GAATTCGGCC AAAGAGGCCT AGTTTAAAGA AAAAAAAAAA GACCCATCAA GGGCATAGAA      60
AAGCTTAGGT GAAGAAACCC TAAATGAAT CCTCATTTAT CAACTCATTG ATTTATTGAT      120
TCATTTGTTC ATTCATTTGT TCACTCAAGA AGTATTGTGT GCCAGACACA GTACCAACAA      180
AGAAAATAAG CATCCACTAC GGCTTTGCAG AGCTTGGTAC GCAATGCCTG GTTCAGAGGA      240
GATATTTGTT CATCGCTTGC TTTTAACTGT ATCACAGCCT AGGGTGGCAT GCAGAGGTTT      300
GAATAAGTGC TGAAACAGGA CAAGTGAGGT GCTTATGGAA ACACACAGGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

```

GAATTCGGCC AAAGAGGCCT AGAAGGAAAT TGTCCCGAAT CCCTGCAGTC TTTCTGTAGG      60
TTGCGGCACA ACGCCAGGCA AAAGAAGAGG AAGGAATTTA ATCCTAATCG GTGGAGGTCG      120
ATTTGAGGGT CTGCTGTAGC AGGTGGCTCC GCTTGAAGCG AGGGAGGAAG TTTCCTCCGA      180
TCAGTAGAGA TTGGAAAGAT TGTTGGGAGT GGCACACCAC TAGGGAAAAG AAGAAGGGGC      240
GAACTGCTTG TCTTGAGGAG GTCAACCCCC AGAATCAGCT CTGTGTGGCCT TGAAGTGGCT      300
GAAGACGATC ACCCTCCACA GGCTTGAGCC CAGTCCCACA GCCTTCCTCC CCCAGCCTGA      360
GTGACTACTC TATTCCTTGG TCCCTGCTAT TGTGGGGGAC GATTGCATGG GCTACGCCAG      420
GAAAGTAGGC TGGGTGACCG CAGGCCTGGT GATTGGGGCT GGCGCCTGCT ATTGCATTTA      480
TAGACTGACT AGGGGGCTCG AG                                         502

```

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```
GAATTCGGCC AAAGAGGCCT AATCAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA    60
GCTCATCTTA AATAAGTAGT ACACTTGAT GCAGTGCGTC TGAAGTGCTA ATCAGTTGTA    120
ACAATAGCAC AAATCGAACT TAGGATTGTG TTCTTCTCTT CTGTGTTTCG ATTTTGTGATC    180
AATTTCTTAA TTTTGAAGC CTATAATACA GTTTTCTATT CTTGGAGATA AAAATTAAAT    240
GGATCACTGA TATTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG    300
GAGAAAATTA CCTCCAGC ACCAGCCCC CTCTCAAACC CCCAACCCAA AACCAAGCAT    360
TTTGGAATGA GTCTCCTTA GTTTCAGAGT GTGGATTGTA TAACCATAT ACTCTTCGAT    420
GTACTTGTGTT GGTGTTGAT TAATTTGACT GTGCACGATC TCGAG                    465
```

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```
GAATTCGGCC TTCATGGCCT AGGATTTCTG ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC    60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCATT GACTCATCTG    120
ATGCTTGTTT TGTTAATTTC TTTAATATTT TTATCACGGG GCAGTGGGAG GGCTTGGGCT    180
TTTAGCCACA GCTGTTTTAA GACTTCTGAT CTCCTGCCCT GCAGGAATAG GTGGCAACTC    240
GAG                                243
```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```
CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC    60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC    120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG    180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAAA CAGGGGAGAA    240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG    300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA    360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCG TGTCCTGGCC CCATGGCCAG    420
ACAGTTCTCC CGGATCTCG AG                                442
```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGGCCT AGATGATCAG GTTTTCTGG ATGGAAATGA GGTGTATGTA	60
TGGATCTATG ACCCAGTTCA CTTTAAAACA TTTGTCATGG GATTAATTCT TGTGATTGCA	120
GTAATAGCGG CCACCCTCTT CCCCCTTTGG CCAGCAGAAA TGAGAGTAGG TGTTTATTAC	180
CTCAGTGTGG GTGCAGGCTG TTTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC	240
ATTCTATTTC TCATCATTTG GCTCATAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGGCCT ACTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT	60
TATTATTGTT ATTATTATTA TTTTGGAGAT GGGGTCTCAC TTGTTCATCC AGGCTGGAGA	120
GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAAGTCT GTGCTCAAGG GATCCTCCTG	180
TCTCAGCCTT CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGGCCT AATCATTAT ATAAAGTTTA AAAACATTTC AGAACTGAAC	60
TATATATTTT TAGAAATATC TGCATATGCC ACATAAATTT TTAATATCAT AAGAATGCTA	120
AACAGCACAT TCAGGACAGG GTGAAGAAAC AGGCATGCAG GTTGTGCAGT AGGAAGCTGG	180
GTAACATTGT TCCTTATGGC TTTGTTGTCG CTTCCAGAAT TTCATTAAAA ACTTTTAAAA	240
AAACATGGGC CCACATTATG AATTACGTCT GCTTTTAGAG TACTAAAAAC TCCAAGCAAA	300
AACACATGAG CCACCGGCA CGCCTGGCCT TTATTTTATT TTTCTACGTT ATTATTCCTG	360
TTTTCAGAGG AGGGAATTGT CAGGGAATC TCGAG	395

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT    60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC    120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA    180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTTCAAAATT CAGTCTGGCC TTTTGTGTG    240
TTGTTGTTGT TGTTCCTTTT AGATGGAGTT TCACTCTTGT TGCCCACTCT GGAGTGCAAT    300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCCAGGTT CAAGCAATTC TCCTGCCTCA    360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT    420
AGTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1026:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC    60
AGGCCATTTC GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCAAGG ACAACGACGA    120
GCCCCCTGTG TCCTCTCCTG GGTCACTCTC CATGACCCTG AGGCAGCGAA GACAAGCTCG    180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC    240
TGCCCAAGAC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA    300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA    360
CAGAAGATGC TGGCGTGCA TCTCCTCCAG CACCGAGAGG CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1027:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CCTTATTTT GCAGATTAGG AAACAAAGAC    60
GTAAGGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAATC    120
AAGCCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT    180
AAATCTTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCCIT AAACAGAAGT    240
AATTAATTCG TTTGCAGAAA TTGGCAAAAT TTGGGGTTCC CTCTTTAAAA GTTTCCTTCT    300
GTAAGTGGGA AAAAATTTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA    360
AAAAACCTT TTTGAATGC TGTGGAGAAA GTAGCACTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1028:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTTT TATCCTTTCA      60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG      120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC      180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTTCCT GTAGTCCCAG      240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA      300
GAATTCAATT AGGCCATGAA

```

## (2) INFORMATION FOR SEQ ID NO:1029:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA      60
CCTGCATTTT ATTAATATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA      120
TCAACTAGTT TTCATAAAGA AAACCTCTGG AGGGCCCATTA GTGCCTGCAC TCCAGGTCTC      180
AAAGTATACT TTGAGATCTA GGTATCTGTC CAAGGTGCTA TCCTGAAAGG ACTCTAAATG      240
AGACAACCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1030:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 280 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT      60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT      120
CATATTTTAT GTCATGTTAA TGATAAATTT TCTGACTTTG ATTTGTATGT TTTTGCCCTT      180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC      240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1031:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTTAAAT ATCTTCGAGC TGAACCTGAG      60
GACCATTATT TTTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT      120
GCAGAAATTA TGTTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG      180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240  
GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

## (2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAATAAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGAATT GTCACCTTAT 60  
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120  
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTGGGATA GAGGTTATAG GATGGTCCTT 180  
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240  
 TAATTGTGTG ACTATCCTAT TCCCAACAA ACTCGAG 277

## (2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAAT 60  
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTATT TGTTCATTCA GCAAACACTT 120  
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180  
 GGAAAATGAA AACCACTGTG ACTTTGTAAA GCTGCGGGAA ATGCTCATT GTACAAATAT 240  
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

## (2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 339 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGA AGACACTGAC TGACTGGAAG ACCTGGATTT CTTTCTGGA GACACTGATT 60  
 GACTGGAAGA CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT 120  
 CTGGAAGAAC TAGATTTACT GGAAGACTTG GATTTGGTGG AAGACGTAGA TTTTCTGGA 180  
 AGACACTGAC TGACTGGAAG ACCTGGATTT CTTTCTGGA GACACTGATT GACTGGAAGA 240  
 CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT CTGGAAGAAC 300  
 TAGATTTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG 339

## (2) INFORMATION FOR SEQ ID NO:1035:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```

GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA      60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA      120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG      180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA      240
AGCAATTCAG CAGAGATCTC GAG                                     263

```

## (2) INFORMATION FOR SEQ ID NO:1036:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```

GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTTCTCACC ACCCCCACTG TTGGGCCTAT      60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCTC CCACAGCACC AACCAGCAT      120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCCCAGCC TTTTCCAGAA ACCTACTGG      180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT      240
CCACTGCCAC GTCACCCTCG AG                                     262

```

## (2) INFORMATION FOR SEQ ID NO:1037:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC      60
AGCCCTCCCG TTTCCCGCCC GTGGGCCCTG ACCCACTCC CTTTCTAGA AGTCAATCCT      120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTTGGAT TCTTAGAGGG CATGGCACCC      180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG      240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG                                     285

```

## (2) INFORMATION FOR SEQ ID NO:1038:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCCTG	GGGCCAGTAG	CAGCACCTG	AGCTCCCTGC	CACCAGGCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	AACTCTACAG	CAGTGCTTAT	TTTTACATTT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TTGGGTTGGT	ATTAACGGGT	TTTTGTCTCA	GAAGTGTATT	120
GTGGATCCCG	GAGTTTCCCC	CAAATCCATC	TACATCAAAT	TTGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAACT	GAATGTCATC	CTTCATAAGG	ATTTGGGCTC	TAGCTCCTT	CTTCTCTACT	300
CACCTCCCAT	TACCCGGACC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGAAA	360
CCCTTTCTTC	AATGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCACTACTA	CCCTGTCAAA	GTCAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATAA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCG	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTCAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CTTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	ATAGAAACAT	CAGTGGGCAC	ATTACAACC	AGAATGTATC	60
CCAGAAGGAC	TGCAACTGCC	TGCACGTGGT	GGAGCCCATG	CCAGTGCCTG	GCCATGACGT	120
GGAGGCCTAC	TGCCTGCTGT	GCGAGTGCAG	GTACGAGGAG	CGCAGCACCA	CCACCATCAA	180
GGTCATCATT	GTATCTACC	TGTCCGTGGT	GGGTGCCCTG	TTGCTCTACA	TGGCCTTCCT	240
GATGCTGGTG	GACCCTCTGA	TCCGAAAGCC	GGATGCACAC	ACTGAGCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC	AGAAAGAACT	GGCAGAAACA	GAACCCAAAT	TCAACAGTGT	GAAAGAGAAA	60
GAAGAACGAG	GAATTGCTAG	ATTGGCTCAA	GCTACCCAGG	AAAGAACGGA	TCTTTATGCA	120
AAGCAGGGTC	GAGGAAGCCA	GTTTACATCA	AAAGAAGAAA	GGGATAAGTG	GATTAAAAAG	180
GAACTCAAGT	CTTTAGATCA	GGCTATTAAT	GACAAGAAAA	GACAGATTGC	TGCTATACAT	240
AAGGATTGG	AAGACACTGA	AGCAAATAAA	GAGAAAAATC	TGGAGCAGTA	TAATAAACTG	300
GACCAGGATC	TTAATGAAGT	CAAAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT	TCCCAGGCTG	ACATAGAGAC	CGACCCAGGT	ATCTCTGAAC	CTGACGGTGC	60
AACTGCACAG	ACATCAGCAG	ATGGTTCCCA	GGCTCAGAAT	CTGGAGTCCC	GGACAATAAT	120
TCGGGGCAAG	AGGACCCGCA	AGATTAAATA	CTTGAATGTT	GAAGAGAACA	GCAGTGGGGA	180
TCAGAGGCGG	GCCCCACTGG	CTGCAGGGAC	CTGGAGGTCT	GCACCAGTTC	CAGTGACCAC	240
TCAGAACCCA	CCTGACGCAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

```

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCCAAA AGTTTCCTGT GTCCCTTGT      60
TATTCATTGC CCTGCCAGT ATTCAAGCAA CACGGATCTG TTTTCTGTTT TAGGTTAGTT      120
TGCAATTTCT ATAAAGTCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGGCCG      180
GGGAGCAGTG TGGCTTCTTT CATTTCAAAT GATTGTTTGG AAATTCATCC ACAGCGTTGC      240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTGTAT TCTATTGTAT GCCTGAGTCA      300
AAATTTATTC ATCTCTTGT CTGTTGATAG CCAATTGGGT TCTTCAGTT TGGGGCCATT      360
ACAAATAGAG GTACTATGAA CTTTCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:1045:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```

GAATTCGGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACTTTGT      60
ATAAATTCAT TGCTGTGTTT ACAGTTTGAA TGGCTCTTTT ACCCTGGCAT AATTTGTAA      120
CGTGTGGAGC ATTTGGAAAA TTTTATTGG ATTATGCAGA TATTTTCAAT GCTGGTATTT      180
CATTATATGA TAGTAAAAAA TCACTTTTGG TTTTGTGTTG TTTTGTGTTT TTTTCTTTT      240
TTTTTGAGGC AGAGTTTCGT GCTGTGCGC CAGCCGAAGG CGCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1046:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```

GAATTCGGCC TTCATGGCCT AGTAACTTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG      60
TGGTCATCCA GTCCAAGGC ATCCTTGCCA GCCCCTACA ATACCTGGAT GGGCGCTTAT      120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAA GAGGAGCTCA CTATTCTAA AGGAAACCTG      180
TGCCATTGGG TTAATAAAGT ATTAATTTT AAACATTGGT AGTTGTTAAG CAGTTGTTGA      240
ATATTTGAG CCAAAATTG TTACCTCCA TACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1047:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```

GAATTCGGCC TTCATGGCCT AGCAGCATTG AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTTC AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTTATGAA GTACCCACTG GATCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTT CTTCACCCTG TGCAGCAGGT GCTGTTATTT CCTTTTTTAA      240
ATTATTATTT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTTGTCACT CAGGCTGGAA      300
TGCAGAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

## (2) INFORMATION FOR SEQ ID NO:1048:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTTGG TTTTATTGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATTGTTTCA TTTTATTTTA      120
TTTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAAT TATTTTATAC AATACAAACA TTAAATATAT AAATCATGCA CTCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:1049:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGGA TAAGGAAACT GAGGTTCCAA      120
ACATGAGATG TAATAGCTTG CCCCAAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1050:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAAATT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAAGTTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```

```

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC      180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTCC CTCCCCACCC      240
TCCCTTCCTT CCTTCCCTCC TTCCCACCTT CCCTGCTTCC TTCTTGCCTG CCTCCCTTCC      300
TGCCTGCCTC CCTTCTGCTC ACTTACATTC TGTTAACAAT GAGAAAAAAA TTCCCCCATC      360
ACTCGAG                                     367

```

## (2) INFORMATION FOR SEQ ID NO:1051:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAAGC TGA CTCACGC      60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA      120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCAGTTC AGCAGCTTGG ATATCTTCTC      180
AGATGAAGAA GTTCGACAGG GGCTCAAAC GTACTCTAAT TGGCCACCT ATCCTCAGCT      240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA      300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG                                     340

```

## (2) INFORMATION FOR SEQ ID NO:1052:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 444 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCCAGGAC AAGACCCTGA      60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG      120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG      180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT      240
GTGCGGAGG TGAAGGGCTT TGTCCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT      300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTGTGGGG ACTTCCGGCG AAAGCACCCC      360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGT GGGGATGATC      420
GCCAGCTTCA ACAACACACT CGAG                                     444

```

## (2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC      60

```

```

GTGACGTCAG TGACCTCATT TTACTTGATC TATTAGCAGC ATTTCATACA GTTGTGACT 120
CTTCTCCATT AAAACATTTA CTTTATTGG CTTCTAGGAA ACATATTTTC CTGCTTTTTC 180
TTCCTATTTC TCTGACTCTT TTCTCAGTTT CCTTTGCTGT TTCCTTTTCT ATCCTCTAAA 240
CATTGAAATA TCCTAAGCCT AGTTTGGGAT TCCCTTGATG GTCTTCATTT CTTTAATGGG 300
AACTGTGCTG GTGACTCAA TTTATATCTC CAGCCAGAAC CTTTCTCCTG AATTCCAG 358

```

## (2) INFORMATION FOR SEQ ID NO:1054:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

CCTTCATGGC CTACTTCTGG TATTACATCA CACTGATCAT GCTGCTGGTG GCCGTGCTGG 60
CCGGAGCTCT CCAGCTGACG CAGAGCAGGG TTCTGTGCTG TCTTCCATGC AAAGTGGAAT 120
TTGACAATCA CTGTGCCGTG CCTTGGGACA TCCTGAAAGC CAGCATGAAC ACATCCTCTA 180
ATCCTGGGAC ACCGCTTCCG CTCCCCCTCC GAATTGAGAA TGACCTCCAC CGACAGCAGT 240
ACTCCTATAT TGATGCCGTC TGTACGAGA AACAGCTCCA TTGGTTTGCA AAGTTTTTCC 300
CCTATCTGGT GCTCTTGAC ACGCTCATCT TTGCAGCCTG CAGCAACTTT TGGCTTCACT 360
ACCCAGTAC CAGTTCAGG CTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1055:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

CGATTGAATT CTAGACCTGC CTGTGCTCCT CGATGGTGTC TCTCCCTCCA GAAAACGCAT 60
GCTTATTGAC CTTGGTTTTG ATCTGCTTGG CCGTGTGCTG CGAG 104

```

## (2) INFORMATION FOR SEQ ID NO:1056:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC AAAGAGGCCT ACACAAGGCT AAGGGTATTG GATATAACGG AAAGTGGAAG 60
CTATACCTGA CTTCCAGAGA ATGTGGACCG GATATAAGAT CTTAATCTTC TCTTATCTTA 120
CTACAGAAAT CTGGATGGAG AAGCAGTATT TATCTCAAAG AGAAGTGGAC CTAGAGGCTT 180
ATTTCACTAG GAATCACACC GTTTTGCAAG GACTCGATT CAAAAGAGCC ATTTTCCAAG 240
GGCAATACTG TAGAAATTTT GGCTGTTGTG AAGACAGAGA TGATGGCTGT GTCAGTGAAG 300
TCTATGCGGC GAATGCGTTG TGCTACTGTG ATAAATTCTG TGACAGAGAA AATTCTGATT 360

```

GCTGTCCTGA	CTACAAGTCC	TTTTGCCGTG	AAGAGAAAAG	ATGGCCTCCT	CACACACAGC	420
CTTGSTATCC	AGAAGGTTGC	TTCAAAGATG	GTCAACATTA	TGAAGAGGGA	TCAGTAATTA	480
AAGAAAACCTG	CAACTCCTGC	ACATGCTCAG	GACAGCAATG	GAAATGTTCC	CAGCATGTAT	540
GCCTTGTTTCG	TCCAGAATTA	ATTGAACAGG	TCAATAAAGG	AGACTATGGA	TGGACAGCAC	600
AGAATTACAG	CCAATTTTGG	GGAATGACTT	TAGAAGATGG	ACTCCTCGAG		650

## (2) INFORMATION FOR SEQ ID NO:1057:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC	AAAGAGGCCT	ACACGTATTG	GCCAGGATGG	TCTTGATCTC	CTGACCTCAT	60
GATCCGCCGG	CCTTGGCCTC	CCAAAGTGCT	AGGATTACAG	GCGTGAGCCA	TCGCGCCCAG	120
CTGAGAATAG	TTTTAAGAAT	TGGTTGAGAG	GCAGTTGCTT	TTCTTTTGAA	TATCTAGAAC	180
TGTTCTGGAC	TAACGTCAAA	GAAACACCAT	GGCAACATTA	AAGGGAAGAT	TATTTGAGAG	240
GCGGGGGATA	GTATGGCTTA	GGACTTGGGC	TGCTACCTTT	GACTTTGTAA	TTCAAAAGAT	300
TGTAATGTTT	CATATTTTCA	ATCTGATCAT	TAAAATATC	TGTGTTACAT	GCAAAAAAAA	360
ACCTATAGGC	AACTCGAG					378

## (2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC	TTCATGGCCT	AATTTTAACA	TTTACATAGA	CAATTCATTT	GGTGTGTTGT	60
CTCCTAGTTA	TTTGGCCCAA	TCTCTGATGA	TTTCCACTCT	GTCTTGGCCA	CTCACTCCGT	120
TTGTCATATC	TGGCCATTA	TCATCACCTC	AAATGCTCC	ATCTTCAAAA	TACTTGCAATC	180
TTATTTATTG	ACCATATTCC	TTCCACTTGG	TTTATTGAAC	TATTCCCTCT	ATCATTCTCT	240
GATTTCACTG	CAGCCAATG					259

## (2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAAAAAACT	ACTAACCCT	GCAAGCTCTT	GTCAAATTTT	AGTTTAATTG	GCATTGCTTG	60
TTTTTTGAAA	CTGAAATTAC	ATGAGTTTCA	TTTTTTCTTT	GAATTATAG	GGTTTAGATT	120
TCTGAAAGCA	GCATGAATAT	ATCACCTAAC	ATCCTGACAA	TAAATTCAT	CCGTTGTTTT	180

TTTGTGTTGT TTGTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240  
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGGTTCATAT 60  
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTCCTC 60  
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTTG 120  
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180  
TTTCTGTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240  
GGAAGTGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA 300  
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGAAGAA CTCTGCTCGA 360  
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGGAACAAGC TAAGTGCCCA CATAGTTACA 60  
AAAATTACGT TAAATAGATA CACGGTTGCT TTTAAGCTCC ACATACAGCA CCATAGAGCT 120  
TTTATATAT TGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACCTGACC 180  
CAGGTTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTTC CTGTTTCTGT ATTCTTATTA 240  
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```
GAATTCGGCC TTCATGGCCT ACCGTTGTTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA    60
GCCAAGCCCA GTCCTTCCTG TTTCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC    120
TTGTGTGAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATGGGTGTTT TGTTTTTTGT    180
TTGTTTGTGT GTTTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA    240
TCTCAGCTTA CTGCAACCTC TGCCTCCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT    300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 136 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```
CGAGTGTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTTCGCA    60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCAGAGAA TCAATTACAA CCAAATGGA    120
AAGGGACAAC CTCGAG                                     136
```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 255 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```
GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT    60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT    120
GGCCTTCCAT ACTTAGCTCA CCCCAGCACT TGAAATTTC ACTTACTAAT ACAAACTGCT    180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA    240
TTCCTCTGGC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTCGGCC	TTCATGGCCT	ACAACCTGCT	TTCCACCTTC	TGTAATCTCC	CATCAGTGAT	60
AAATTACCCA	TCAGCTTTCC	AGATTCCAGA	ATTTTGCTGA	CATCTCCTGT	TGGCTATGTT	120
CTTATTTCT	TTTCTGTTA	TTCTGTGAC	CTTGTGCCCT	TTAATTCTTT	CCCATAATTT	180
GTTGGGACTT	CAGAAGGAAG	TGGAGCTAAA	GGCATGTGTC	TGCCTGCCCC	ATCTTGGCTG	240
GAAGTTGGGA	AGGCCTTCT	TCCAAGGCAC	CCAGCATAGC	ACCTGGCACA	TGATGGATGC	300
TCAGCAAATG	TCTGTGGGTC	TTCTTTTAC	TAAACAGGCA	GTTGATTTC	CCAGAAGTAG	360
TGACCACCTA	AGTCTCGAG					379

## (2) INFORMATION FOR SEQ ID NO:1067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

GAATTCGGCC	TTCATGGCCT	AACACAGCTC	ACATCAGAAT	ATAATAGTGG	AACTAGGGTG	60
ACTTCACTCC	CTTTCACCTG	ATGCTATCT	TGGCCTTTTA	GCACCTTGAC	TATCCCTGAA	120
AAGACTGGGT	CTTGTTTTTC	CCAGGGAAAA	AACGAAGTGA	TGTAGATCTA	AGAAATAGTG	180
CCTCTTTAAT	ATTTAATTCT	TACATGACAA	CTAACACACA	GGGAAAAGGC	TATGTTAAGT	240
TGATTATAGC	TCCTCTTAAA	ATGCTCTATG	CTGTCAGTTG	GTCTTAGAGA	CATGGGAATA	300
ACCAAGCAAT	CTCGAG					316

## (2) INFORMATION FOR SEQ ID NO:1068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

GCGATTGAAT	TCTAGACCTC	ACCTCTGATC	TATCTCTTTT	ACCTCAGCAA	TTTATTTCCC	60
AATTATTATA	TCTACTTTAT	TGTTCTTATG	AGACAATAGA	CTATGATAAT	TTTCCAGAAA	120
TAATTTTGTT	TTCTTCCTCC	CATCTTCTAA	TGTTGAGACC	GTTTCTCTGT	TTTCTTTCAT	180
CTCTACCCCT	CAGTCTCATA	GGTTTATTTT	TCATTTCCAA	TCCAGCGATT	TCAAAACCTG	240
TACAACAAAC	CAACTCAGCA	GCCCTTGCA	ACTTGAGGAG	ATTTACAAA	CCACTCGAG	299

## (2) INFORMATION FOR SEQ ID NO:1069:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:



GAATTCGGCC	TTCATGGCCT	ACCATTTC	CAACCATTTT	AATCTGCGCA	TCGGTCCCAG	60
ACGTAGGGAT	TCCTCGTCTC	ATCTTGAAA	CATTGCCAGC	AGTGGTTCG	ATTTGGAAGC	120
CTGCGTCTGT	CACGTGACAC	CGTCTGAGCC	TGTGCCTGCC	TCTCTTTCTT	CCGGCAGTGC	180
CCTGTACTCT	GTGGGGATGA	CGGCAGTGGG	CCTGGCCATC	CTGTGGTATG	TTTCCGTCT	240
GGCCGGGAGA	CTCGAG					256

## (2) INFORMATION FOR SEQ ID NO:1070:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

GAATTCGGCC	TTCATGGCCT	AGCCATCATG	TTTATTAGAA	GGTGGATT	TGGTGTGTGC	60
TCTAGACAGA	TACAGAATAA	ATACCTGCGC	CTTGAGAACA	GGAAGTCCAC	GATTCATACA	120
AAGTGCTCAC	TACAGGAAGT	TGCTGTGTCA	AAATCCAGGC	AAGGACCCAA	CTCCGGGCAG	180
CCCTCCTCC	CTGCTGACCT	CAACAAGGGC	TGTGCTATTG	TTTTTTATT	TATTATTTTA	240
TTTCTCTTA	TTATTATTAA	TATTATTATT	ATTTGCTTTT	GCTGTGGTCA	CTATCATTTG	300
CAAAGTTCCT	TTCCCTCGA	G				321

## (2) INFORMATION FOR SEQ ID NO:1071:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

GAATTCGGCC	TTCATGGCCT	AGGGAGGTAT	TTGTCATTGT	GAAAAGCTGG	GAATCTCAAA	60
CATAGTCAAC	TTAACTAAAA	AGAAGCTAAT	ACAGGTGAG	CATTCCTAAT	CCAAAAATCC	120
AGAATCCAAA	TTGCTCCAAA	ATCTGAACT	TTCTGAATGC	TGACCTGATA	CTACAAGTAG	180
AAAATTCCAC	ATACAAGTAC	TTAACACAAA	CTTTGTTTCA	TGCACAACT	ACTAAAAATA	240
TTGTATAAAA	TTAACCTCGA	G				261

## (2) INFORMATION FOR SEQ ID NO:1072:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

GAATTCGGCC	TTCATGGCCT	ACTTGGGCTC	ATTTTATTTG	GTGAATTGA	TCCTGGCTGT	60
GGTGGCCATG	GCCTATGAGG	AGCAGAATCA	GGCCACCTTG	GAAGAAGCAG	AACAAAAAGA	120
GGCCGAATTT	CAGCAGATGC	TCGAACAGCT	TAAAAAGCAA	CAGGAAGAAG	CTCAGGCAGT	180
TGCGGCAGCA	TCAGCTGCTT	CAAGAGATTT	CAGTGAATA	GGTGGGTTAG	GAGAGCTGTT	240

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCCT 300  
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60  
 TTATAAGTTG TCTAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCTAAA 120  
 TTTCAAGTGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AAAGTGGGTC CTGATAGTAG 180  
 GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240  
 ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCA AATCCTCTC TGGCTGCTGA 300  
 CCCTCAGGTT CAGTTTTTCC TGTCAAGTGA GTTTGAAGGT GGGGCGTAGG CTGGCTGTGG 360  
 AGAGTAGGGG AGAGGACCTG GGTCCAGTA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60  
 AGAAGCATGA ACAGACAACCT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120  
 CTTCAATCTA GAGGAAACTT TGATCCAAA GCCATGAATA ATTTTATGA CAACATAGAA 180  
 CCTGGCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240  
 GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300  
 CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAATAA ACATTGCTT TTTATAAAGA CTGACAAAAT 60  
 ATAAATCTTT ATTCTAACCC TATCCCAAA ACTAGCCAGG CCACACCCA GATGTTCTTA 120  
 TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTTGT TTTTGTGTG TTGTTGTCAT 180  
 TGTTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCACGACTC 240  
 GAG 243

## (2) INFORMATION FOR SEQ ID NO:1076:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAAGAT CATTAAATAA CGCCTTAATC TAAGGATCTG      120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAAG      180
TGGGCAAGCA ATAGAGAAGA TACCCAACAC TGAGAAACGG AAAGGAAAAA AGACCACCCCT      240
AATAACTACT GCTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG      300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTTATAT AAGGATAATT TGTCTTGAAT CAAGACCACA      420
CTGTCCTCTC CTTAAACCTA ACTGCTACAA GCAGACACCA CCTCTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAAA ATTAGGTATC ACACCATAAA CCTCCACAA GAGCAACCTT      540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCAACTTG CCTAGGCCTG CCGAATTC      598

```

## (2) INFORMATION FOR SEQ ID NO:1077:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAACTCA      60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAAG      120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTTAAAAAGA AGATCATTTG CTTTTCATTC      180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTCCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTTCATCA      300
TCCCAATGCG CGTAGCCTTC ATGATTGAGG AATTGCTGT CTCGAG      346

```

## (2) INFORMATION FOR SEQ ID NO:1078:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC AAAGAGCCTA GTCCTGTTA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT      120
TATTCTCCTT GATGACTATT TCATACCCTT CCCTCTTTCC CCAAACCTTC AACACCTCCT      180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTGTAGGGA ATTTCCACAA GTCCTATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300

```

CTATTTGGCC TTCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360  
CATCTCCACT CCACTTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 261 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTTT TTTTTTTTC 60  
GAGACAGGAT CTTTCTTTGT CACCACAGGC TGCAGTGCAG TGTTGTGATC ATAGCTCACT 120  
GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180  
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTTGTAGAG ATGAGGTCTT 240  
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGTCTGT 60  
TGGATAGAAT TTAAATTGTC TACATAAATA TTGTTTTAG GACCCTTAGA TTTTATCTGA 120  
ATACACAGAT TAGGCTTTAA AACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGGC 180  
TAAGTTAGCT TTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 425 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCACTTTA CTTCATAAAA AATCATTAGA 60  
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAACTGC 120  
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180  
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240  
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300  
GAAAGCAAAG CAAGGAAAAG AAAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360  
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420  
TCGAG 425

## (2) INFORMATION FOR SEQ ID NO:1082:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGCCT AAGACTTCTT GCAGGAAAAA TGAGTGCATT GAGGATAGTA      60
ACCTGACTTT CTGACCTGTG ATTAAATTAT GATAGTAGTC AGTCATTTTA CTCTCCCAGG      120
GTTTGAGGAA GTGGCCGGTG AGGACTTGGA GCCTAGTGAG GAGTTAGTAG AGCTGCCCAG      180
GGTGGAGGAG GCCACAGAGG ACAGCCCTGG TGAAGAGAAC AGTGAGGCCT TGGATGTGTT      240
GATATCCAGC AAGGACCTGG CACTGTCTAG TGAGGACGAG GCCTGCACAG GATCTCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:1083:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

```

GAATTCGGCC TTCATGGCCT AAGTCACTTG TGTAACGTAG TTATACTTTG CTGCATTNTA      60
ATTAACCTTC AACAGCTATT AAAGTGGAAT GTAAGTTAAA TTTTGAAGGA AAGGAAATAA      120
ATGTTTTCCA TATTTCTGCT TGATTTACTT TCTGTATGAG AACAGCTGTG TTTTGTATAG      180
GTTTATGGTT TGCATGAGTT CATATTTAAA GTGATCCAGG CCAATGCATG GCTATTGCTG      240
TAAATCTTGA TGTTTATTTT TGCCTTGTA AGTTCTATCA CGGCCTACCT GGAATTTTAA      300
ATTCAGTAGA CAAATTAATT GGTCTCTGTC ACAACTTTTT TAATAAGTAG ATTATTTTAC      360
AAAGAAATTT GAACAAATTT AATTGAATCT TTTGTTTAGC TTGCCTCTAA GAACTTTTCT      420
TAATAAAGCT CCCAAACACT CGAG                                444

```

## (2) INFORMATION FOR SEQ ID NO:1084:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

```

GAGTGAGACT CCCTCTCAAA GGAAAAAAA AAGTTTCTA GGATCAAAAT AGGAAAACAG      60
TTGTTTCAGA ACTCATGATA TGAGTCATGA CTACAACCCA CCATATTCAG TAAACCTCA      120
CCTTGTCCTG TTGTCTGACA TTAAGTGTTT TACGAGATCC ATACCTGTGA AATCAGCTCC      180
TCTGGAATGA CAGATGCTGG AATAACTGGC TGGGGCTGAC TGCCCAAAAG CCCAGACCTC      240
CGATCCCGTC CTGTCCGAAT AACTCGAG                                268

```

## (2) INFORMATION FOR SEQ ID NO:1085:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```

GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251

```

## (2) INFORMATION FOR SEQ ID NO:1086:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```

GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAGGAAA ATGATGCGGT AACAAATCAG      180
GTTTAAACC AGCTTATCCA AAAGATTCTGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258

```

## (2) INFORMATION FOR SEQ ID NO:1087:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```

GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTAACTG      120
ATTTGGGAGA GGTGCGATAA AGAAAAAGGA GCATTAACCT TGACTATGCC TTTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTGGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391

```

## (2) INFORMATION FOR SEQ ID NO:1088:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCGGCC	TTCATGGCCT	AGCCTTCNAA	GTTTGAATGG	CCCTTAGGTT	TTAAGTTATC	60
TATGCAAAGA	TGAANAAGGC	CTTCACATTC	TCAAAGGTGA	CAACTCATAC	CCAGCCATTT	120
GCTTATTTTT	GCCTGCAGAC	CTCCAATGGA	AGTCCGGGCA	CATGGCGGAG	AGCCTCACCA	180
ACATGCCACG	GCACTCCCTC	TACATCATCA	TTGGAGCCCT	CTGCGTGGCC	TTCATCCTTA	240
TGCTGATCAT	CCTGATCGTG	GGGATTGGCC	GCATCAGCCG	CATTGAATAC	CAGGGTTCTT	300
CCAGGCCAGC	CTATGAGGAG	TTCTACAAC	GCCGCAGCAT	CGACAGCGAG	TTCAGCAATG	360
CACTCGAG						368

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 409 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC	TTATGGCCTA	GTTCAATTTAA	CTAATACTTG	TATTAAATCA	CTTCTAAATG	60
CTTATTATAC	CCTGTATTAT	AGTATTATAT	TCTGAGTCTT	AAAGGTGCTT	AATGTGAAGA	120
TTCTCTCTCT	ACATATTCAA	CTCTTACTAA	CTTTTGGCTT	TAGGTAGAAA	TCAGTTAGTG	180
TATTATATGA	TAAAATAGGA	AACTATTTC	CTAGGGGTAT	AGGTATTTCAG	TAGGGAGCTT	240
TGGAGTCTCA	ATGAGCTTCT	TAAAGAAGCA	TTTTTAATGG	TAGGTTTTAG	GGAGAGTTTT	300
TGTAGTAAGA	TAAAGTAGAT	GAGAAAGTGT	TGCCTCTAAA	CAATCAACAA	GCTGGGAATG	360
GGGTGCAGAA	TGAGGAGAAC	CCTAAGCAAT	AGGCAATAAG	AAGCTCGAG		409

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 359 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCGGCC	TTGGCCTAGT	GAGAGAGCGT	CAAAAAA	ACT	TCCATCTCAG	CCAACCACTG	60
ATACTAGTAC	TGACAAAGAA	AGAACTTCAG	AGGACATGGC	TGATAAAGAA	AAATCTACAG		120
CTGACTCTGG	AGGTGAAGGA	CTGGAAACAG	CCCCAAAGTC	TGAAGAGTTC	AGCGACCTCC		180
CCTGTCCAGT	CGAAGAAATT	AAAAATTACA	CAAAAGAGCA	TAATAATTTA	ATTCTGCTAA		240
ATAAGGATGT	TCAACAGGAA	AGCAGTGAGC	AAAAAAATAA	ATCAACAGAC	AAAGGTGAAA		300
AGAAGCCAGA	CAGCAATGAG	AAAGGAGAAA	GAAAGAAAGA	AAAGAAGGAA	AAGCTCGAG		359

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 280 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTTAT	TCTAAGAAAC	TTAACTCCAT	TTTAAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAAG	CCTTGCCATT	TCACACATGC	120
TGTTCCTTTG	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTTGGGAC	TTCTTTTTC	180
TTTTCTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA	240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG			280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAAACCATG	AAAGAAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTTCTGG	60
AAAAAGAAAC	AGCACAACTT	CGAGAACAAG	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAGA	AGAGGTTTCA	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAGATATT	GTGTCAGTAA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTGGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTTG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAG	180
AAAAATCTTT	CTCTCAGGAG	AGAGAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```
GAATTCGGCC TTCATGGCCT AAGCTGTTAG TGATTCTGAC ACCCTTGGAC CTCCAGGAGT    60
AGCTCCTCCT GCCACGAGAG GACTCTGGCT TTTCTAATAA GGAAGGTTCT GGCCAATCAG    120
TCCAAGAAAG GCCCGGATTC TCTTCCAAGG TGTTGTCTCT GCAGAAATGT TCCTCAGGGT    180
GGAAGGTGCT GCTGCAGCAA GGGATGTCCC CTGAGTTTTC AGGTATGTAG TCTGTGGCTG    240
CAGCAGGTGA ACACTCCTCA CACTCCCATT TCTTACTGTT AGATCTAAGA GAGGAGCAGT    300
CCCTGTGGGT TCCGTGGGAT CCGCATGTAG CACACAGAAT GAGGCACCAC CTCCTTCAT    360
CCTCAAAGCT GTCTCTGCCT TGTTCATACA GACAGATGGG GGCATCACAG TGCTGATAGC    420
GCTGATATAA GTCTGAGAAA GCCCCTGGCT CGAG                                454
```

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```
GAATTCGGCC TTCATGGCCT AGTGATCTCA TCTCTCCGTC CATGGGCGAA AAAACAGCCA    60
TCACCAGGCC ATTCACGCTT TGTGCTTTTG TTAGCAGAGC CCAGGCAGCC CTGCAGCCCA    120
CATCTAGGGT ACAAACGGAA CGGCGGCGTT TTCCTTGAT CATTAGAGG AAATTTTGA    180
GCTGAACAGT ATTTTTCCTC TCCCTCTCTC TCTCTCTGAA ATATTGCTGA GATTAAAGG    240
AGGACGAAGA CAACAGATTC ATAGCTGGGT CTTGCTGTTT TCCTGACGCT GACCACAGCG    300
GATCTAGTTT CTCTGCAGAA GACAGCAAGA TGCCCCAGGG AATGTTTGTG AAAAAGGATG    360
ACTGGATGGG AAGCAAGCTG AAGAAAAAGA AGGAAAGAAA GAGAGAAATC AGTAAATCAC    420
CACACAAGAG GTGGAGAAGA GGAATCGAG                                449
```

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```
GACTGGCCGC AAGGGACGGG TTGTGAGCAA TGATGATGGA AGCATATCTT ATGAGTCAAG    60
ATCTGAACTT GATGTGCCTG TGGAATACT AAACATCACA GAAAAACAAC GATTATGGA    120
TGGAGATAAG AATATTGCTA TCATCTCAGA AGCTGCCATG CTCGAG                                166
```

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACATTATTTA	CACCTGTCCC	AGACTTTGAT	TCAGGAACTA	60
ATGCTGCAAA	GCAAGGACTA	TGATGGAAAA	TGCTCACTGC	AAGAATGGTA	GCTGCAGCAA	120
GATCAAGATC	CCAGAAAGCA	GTGGCCAAGG	CACTCACTGT	AGACTTTAGT	GCCTGCAGCA	180
TCTGGTGCAA	GCTACACTGT	CTACGCCAG	GAACACAGCA	GCAGCATCCG	GCCTGGGCCA	240
ATTCTGTGTA	AGATTTGATG	CGCTGTCCCT	GGCTGCAGTG	CCTGCAGACA	TCTCTCTCTA	300
GCCCTTCTAA	CAATTTCACA	GCAACTCAAC	ATCTTTAAAA	ATTTATTAGC	CAACCAAAAT	360
CAGCTTCTGT	GGCATGCAAG	TAAAAACCCA	GGCTGATATG	TCTGAATACA	GAAGATTTAT	420
ATTAGTTCTT	TAGAGTCAAT	AATCCATACA	GACTCTATTC	TAGCTTCTTT	GTGAAGTGGG	480
TAAGAATTCC	TCTGCCTCGA	G				501

## (2) INFORMATION FOR SEQ ID NO:1098:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	ACTTCAAAAA	CATATATTAA	TATTTTGTGA	CCACGTAAGT	60
TCATCAGAAG	CCTGACTTTA	ATCTCTGATT	TATTATATTT	GAACACTGTG	AAGAAGCAGT	120
TTAACACTGA	ACGAAAGTGT	CGTAATGCAG	CTTTCAAAGT	GGCCATTAAA	GACAGATCTC	180
TGCTTTTCTA	TTAGTACATT	TTCTAAGATG	ACTATCATTG	CCATTGTAGT	CAGCTTTGTG	240
TACCTTTATA	GAGATTCCAG	TATAAACCCA	GAAACGCTCG	AG		282

## (2) INFORMATION FOR SEQ ID NO:1099:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGCCT	AGGAACTTT	TCAAAGAAGT	AGTCCACGAG	AACTACCTTG	60
AAAGAGCAAA	ACCAGCCAGG	TGCAGTGGCT	CACGCCATA	ATCCCAGCAC	TCTGGGAGGC	120
CCAGGTGGGT	GGATCTCGTG	AGGTCAGGAG	TTCAAGACCA	GCTTGGCCAA	CATGGTGAAA	180
CCCCATCTCT	GCTGAAAATA	CAAAAGTTAG	CTGAAAATAC	AAAAGTGGCA	CATGCCTGTA	240
ATGCCAGCTA	CCGGGAAAGG	CTCGAG				266

## (2) INFORMATION FOR SEQ ID NO:1100:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```

CTCGAGCGTA TCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA    60
TAATAAAACC TTCCAACAAG CTTCTTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCCCC    120
TGAACCAAAA AAAAAAAG ATAGAGTATA AACATACAC TTTTCAGGAA TGCTTATTGG    180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTT ATTTTATTTT ATTTTGTAG    240
ATGGAGTCTC ACCTAGGCTG GAGTTCAGTG TGGTAATCTT GGCTCACTGT AGGCCATGAA    300
GGCCGAATTC                                     310

```

## (2) INFORMATION FOR SEQ ID NO:1101:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTCT GCCATCTCTG ATATTATGTC    60
ATCTGATCAA GAACTTACT CTTGTAAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA    120
TGAGCATGTA CATTCCAAAC TGGAGGAAG TAAAGTAACG AAATCTAAGA CTTCTCCGGT    180
GGTATCTGGT TCATCTAGTA AATCAACCAC CTTTCCAGG CCACGACCTA CCAGGACTTC    240
CCTCTTGCGC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACTTGCTG ATGCTGACAA    300
AGCATCTGTT GCTTCTGAAG TATCCACAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG    360
GCTCGAG                                     367

```

## (2) INFORMATION FOR SEQ ID NO:1102:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```

GAATTCGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC    60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG    120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AACAGGAAA    180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAAGAA    240
AGAAAGAAAG AAAGAAAGAA AAAGAAAACA GGAAAGCAAG AAAGCACGAA AGCAAGCAAG    300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AACCGGAAA    360
GACTCGAG                                     368

```

## (2) INFORMATION FOR SEQ ID NO:1103:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTTT    60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC    120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA    180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG    240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG    300
ACAGGCACAG ACCCCCCCCC ACCTCGAG    328

```

## (2) INFORMATION FOR SEQ ID NO:1104:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC    60
TCTGTTTTGC AGTTTAGACA CAACTGACCA GCATTGTAA AATGGAGATC ATACGGCTGG    120
TAGAACAGAC TCTTTGTGGC CCAAAATTAG CAAATTATAA ATAGAACTA AAGCCATCCC    180
AGGCAAGGGT TAAGTTATGC ACCCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA    240
CTCGAG    246

```

## (2) INFORMATION FOR SEQ ID NO:1105:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA    60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAG TCGGGACAGA    120
GAACAAGATA GAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA    180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA    240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG    298

```

## (2) INFORMATION FOR SEQ ID NO:1106:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTCAGCTG CTAGAATTTC GATGCAGGAC    60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCATT CACGGGAAAC    120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA    180
ACACAGTAAA CAATTGCACC AAGATCTCGA G    211

```

## (2) INFORMATION FOR SEQ ID NO:1107:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GAATTCGGCC AAAGAGGCCT ACCTGCTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA      60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAAACTC TTCATCATCT TGGTCCTCAT      120
TCATTATGGC AAACCTCTTC AGAGTCATCT TCCCACTGAT CTTCTCCTGG AGGTCTTTCT      180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA      240
TCAGCCTTTC CATCTCCCGG CAACTCGAG                                         269

```

## (2) INFORMATION FOR SEQ ID NO:1108:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```

GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC      60
GTTCCCAAGT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT      120
GAGTAGTCTC GAG                                                             133

```

## (2) INFORMATION FOR SEQ ID NO:1109:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```

GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA      60
TTTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC      120
GAG                                                                           123

```

## (2) INFORMATION FOR SEQ ID NO:1110:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC AAAGAGGCCT AGTGTTCAG ATCCTACGGC TTATGAGGAT TTTCCGAATT	60
CTAAAGCTTG CCCGGCACTC GGTAGGACTT CGGTCTCTAG GTGCCACACT GAGACACAGC	120
TACCATGAAG TTGGGCTTCT GCTTCTCTTC CTCTCTGTGG GCATTTCAT TTTCTCTGTG	180
CTTATCTACT CCGTGGAGAA AGATGACCAC ACATCCAGCC TCACCAGCAT CCCCCTCGAG	240

## (2) INFORMATION FOR SEQ ID NO:1111:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTCGGCC AAAGAGGCCT AGGTGGGGAG GGGAGGGGAC AGGAGAAATG AAATACCTTC	60
ACCGAGAACT CAGCAGCTGC CACCGCAGCT GCCTCCTCAG GATCCGGTCG TCGGGGATAG	120
GGAAAGGGAGG GGAAAGGGGA ACGGAAAACA AAAAAAGGG GGAGGGAAGG GGGAGGAAGG	180
AGTCGGGGAC GGCCTCAAAC TCAGCTCAGA GGAGTCGCTG CTGCAGCCGC CACTCGGTAC	240
CCGCTGCTAG GCCTCTTTCG CGAG	264

## (2) INFORMATION FOR SEQ ID NO:1112:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC AAAGAGGCCT AAATATTAGA AAATGTATAT TATAGAACAT GATATATATT	60
TACATTCATC TCTGTATCT CTCAGCTGTT GTTAGAAGGA CAGAAATGTTA AACTTTATCT	120
TAATTAGTAT ACTAGAAAGG GCAGTATAAT ACTGTTTTAA AGTGAAGGCA TGAAGTAAAC	180
TAAAATATT CATAAGGCTT AGCTAGAGGC AGAGTAACGT GTTTTGTTC ATTGGGCTTC	240
CTTGACTTA GTTTTTTCAT TTAATAATTC AAACCAACAC TTTTAAAAA ATAATTCAGA	300
TGAGACTGAG CCATATCTGC AGTAAGAGAA ATATTCTTA ATGTTTGGT TACTTATGAT	360
AGAGTACTTT TCTTGATACT GTTAACCTTG TGCTTTTAA AAAAAAGTAT TCTCTAACAG	420
ACCTCTTAAA TTGTGACATG AAGGTATGTA ATTAGATTTC AGAAATTGGT TTATTAGTGA	480
GGAATTTTAA TCAATAAATG TCATGGGGCG GCGCTCGAG	519

## (2) INFORMATION FOR SEQ ID NO:1113:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GGCCACCTA GTTGGTATCC CAAATTCACA CATTCAAAAG CAAAGCCATT TCTCACCTTC      60
CTCCAAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCTTTAT TTTCTATTCC      120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA      180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCTCTTT CAATTCAAGA      240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC      300
ACCTGCCCCA CCTCCACCTT CCCAAACCCT CTGTATTCTA GCCAGAGCAT ACCTGCATTTC      360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC      420
TTCCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC      480
TGTCAAAAGC TAAAGTCATG GCCCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG      540
GTAGGCCTCT TTGGCCGAAT TC                                     562

```

## (2) INFORMATION FOR SEQ ID NO:1114:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCAGG      60
CAAGCAGCTG GTCAGTCTTT GCTCAGTGTC CAGCTTCCAA AGCCTAGACA ACCTTCTGT      120
AGCCTAAAAC GAATGGTCTT TGCTCCAGAT AACTCTCTTT CCTTGAGCTG TTGTGAGCTT      180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAATCTTC TGGGTAGTCC CCTGTTGATT      240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTTG ACACAAAGCT      300
TCTAAAGCAG GTAAATTGTC GGGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA      360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC      420
TTCAAGCCCC CTCAG                                     435

```

## (2) INFORMATION FOR SEQ ID NO:1115:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCGCCCC      60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAACATC      120
GGGATCCTGG GAAACTTTGA AAAGCACCCC AAAGAACTGA TCAGGGGGCC CATATGGCTT      180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT      240
AGAATGTTG CTGATGACCT GCACAACCTT AATAAACGCA TCCGCTATCT CTACAAACAC      300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT      360
CTGTCACCTT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAACGGCT TTGTATTTTC      420
TCTGTAATAA AATGGGGCTT CTTTGGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA      477

```

## (2) INFORMATION FOR SEQ ID NO:1116:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTTGTACTT TCCCTGCTCC      60
TCATCTTGGA GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCCAATTT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCACTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAACCT GCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAAATCA AAAGGTCATT TTCACAGGGT AGTTATACAC CATAAAGGAG      420
GCAAAAGCTCA TCGTGGGACA CAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAAACACAG AAGAAAGGCT GTGGGTTTCAT GGAATAAGTA      540
AAGAACAAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CCAAAGTCAA

```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTTGTAA CATTTTCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTACCAAAA CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

GCACTGCTTC TGTAAAGTC ACTGACCTTA ACAGTTTAGA ACTAGATAAA GGAAATTTTG      60
TGGTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG      410

```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTTGCAGCC GAACTTGGAA GCCACTGTAT      60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA      120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA      180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAGT TCAGCCACTT CCAATTTCTA      240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAA CGGGAGAGCA      300
AAATTTCTCT TCAACCTATA GCAACTGTTC CCAATGGAGG CACAACACCT AAAATCAGCA      360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT      420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTTG TTGCAGCTGC      60
TGTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CTTGAATTC TGGCTACCAC TTCTGCGGTG GCTCCCTCAT      180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT      360
CTCCTCACCT GCCGTCACTA ATTCCCGCGT GTCCGCCATC TCTCTGCCCC CTGCCCTCC      420
AGCTGCTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA      480
CTACCCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGTGAAGC      540
CTCCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCCTCG AG                                         592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTT ATTCAGAATA ATAAATCACT CTTTATCATA      60
GTATCTTCTC TTCCCTCTTC CCCTTTAGTT TGGATAGCCT AACTCTGAGA AGTTAACCCCT      120
TAAACAGTTT TCTGGAAGAG ACTGAATTTT TGGGTCCTTG CAGCTGTGAT GGTTTCAGAG      180
CTCAGACTGA TCAGGCATCA AGCTACCCCTC AAGAGTTTCT GGGCTGGATG TTTCAGAACA      240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTTCAAAAC GACCAAAAGA CCCCACCACT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC	TTCATGGCCT	AGTGAACTC	CATTTTTTTA	CTGCTATTAC	TCTGTGTTTT	60
CAGTTTTATG	ATTGGAATA	CCATGATGGG	AACATCTATA	CTAAGCATTG	CTTGGGGCAT	120
AAAACAGGCT	GGATTTACTA	CTGGAATGTG	TGTCATCATA	CTGATGGGCC	TTTTAACACT	180
TTATTGCTGC	TACAGAGTAG	TGAAATCACG	GACTATGATG	TTTTCGTTGG	ATACCACTAG	240
CTGGGAATAT	CCAGATGTCT	GCAGACATTA	TTTCGGCTCC	TTTGGGCAGT	GGTCGAGTCT	300
CCTTTTCTCC	TTGGTGTCTC	TCATTGGAGC	AATGATAGTT	TATTGGGTGC	TTATGTCAAA	360
TTTCTTTTTT	AATACTGGTA	ACCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 478 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

AGCAATTCCA	TAAACACATC	CTGGTGTCT	CACAGCCAAG	GTTTTTAGGT	TGCTATACCA	60
ATGGCTTATT	AAATGAAAAT	GGCACTAAAA	GTTTCTTGAG	ATTCTTTATA	CTCTCTGCCT	120
TCAGCAATCA	ATTCCATTCA	TACATCAGCA	CTCTGCTGGT	TCTGTTTGAA	ATATGTTCTG	180
TATTTAAAC	TCAATCTTG	TTGGATCTCT	GCAGGGCTTG	TGACCAATGA	AGTCATATTT	240
GTTGATGGTT	GACAAAGCTT	GCTTCACTCC	ATCAGAGAAT	GACTATCAAT	TTTTTTTTAA	300
CTGTCCTATC	ACGTCCTCTC	CTGTCACCCA	TTTTGAAGAG	TGGCAGAACT	TGAAGTTCAA	360
CTTCTCTGT	AAATATCCAA	GTATAAAGCC	CAGGAACCTC	TAGAATAACC	CAGATGCGCT	420
TTAATTTTTT	TTAATATGTT	TTGATCAGAG	AACTCCTTAG	GCCTCTTTGG	CCGAATTC	478

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 450 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC	AAAGAGGCCT	AGGAATTCAG	TGCAAACT	ACTTTGAACT	GTGGTTCCTA	60
ATTTCACGA	AAGTTTTTCT	CTGTTCTTCT	ATTATGGCAC	TTTTCAGGGT	CTCCCTTGTA	120
CATTTTAGTT	TTTGTGTTTT	TCAGTAAGTG	CCTTGAGATC	AGGGACCGGT	TCTACTGGTC	180
TGTTCCAACC	ATAGTTCCTT	AAACATTGTG	TTCCATTAA	ATTGGGTGAA	TTGAAATGAA	240
TTTATAGGAA	GCTCCTTAAC	CTGGGGTCCT	CAGACCTCTA	TGGGGTCCAT	GGACAGAATT	300
TGAAGTGGGA	AGGATATATG	AACCTGGATG	GAGGAAAATT	ACTTATTTGT	TTTTTACCAA	360
CCTCTCCTTT	GTAATTTAGC	CATTGTGTTCA	ATTATAATGT	AGGCAAATAA	AAATAAAAAA	420
AAAAATAAAA	TAAAGGCAGC	TTAGGCCTCT				450

(2) INFORMATION FOR SEQ ID NO:1125:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT      60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC      120
CCGGCGTTCTG GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC      180
TCGCATTCCA CGCCCGGCTC CAGGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA      240
GAATAGGTTG AGATCGTTTC GGCCCCAAGA CCTCTAATCA TTCGCTTTAC CGGATAAAAC      300
TGCGTGGCGG GGGTGCCTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AACTTCGGA      360
GGGAACCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC      420
GATTTCACG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC      480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCCGGC      540
CGGCGGGGCG

```

## (2) INFORMATION FOR SEQ ID NO:1126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC AAAGAGGCCT AGTTTGAGG AAGAAGGCAT GGGATAGTCT GAGAACAAAC      60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA      120
GACTCCCAAG GCCTTGCTGC TGTGTGCTG CAGGCAGCTC TGTAGGGCAG GCTGTTGTCA      180
TTTTGCAAGT GAGCAAGCAG AAGCCCAGGC AGGTGAGTCA TTTACTCCAC AGTTCATAAC      240
TTGGATTGTG GGTTAGTTAC ACCTGACTCC AAAACTTGAC TTTTACTAC TCAGCTATAC      300
TGGCCTCTCA AGAAAGGCTA GGCCCTAATT TCTAGACTCT CTTTACCAA TAATACCTGT      360
TGCCACGAAG TAGGCCTCTT T

```

## (2) INFORMATION FOR SEQ ID NO:1127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAAACATAA TCTCTAAATT      60
CTTCAATACT AAGAAATACC TTGTTTTAC CCCTAAAATC AAATGCCATT TTGGCTGGAT      120
ATAGGATTCT AGGATTAAAG CCTTTTTCCA GCAGAACTTT GAAGACATTG CTCCATTTAC      180
TTCTAGCATC CAGTGTGTCC AGTGATAAGT CTGCTGTCAA CCTGATTCTT GTTCCTTGGT      240
AGGTAATTTT TCTTCTCTCT CTAGAAGCCC TTATTATTTT CTCTTTATCA CTAGAATTCC      300
AAAATTTTAC CAAGATGTGT CTAGGAGTCA GTCTCTTTTC ATCAATTTTA CTAGGTACTC      360

```

G

361

## (2) INFORMATION FOR SEQ ID NO:1128:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCA ACGCTGGGGA    60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTTGA    120
TGACTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG    180
AGTATCAGCC GCTCTTGAAG AAGCCGACAA GATGTTTCTG AGAACAAGAG AACCAGCCCT    240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA    300
AGAGCTTTTT TCACTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG    359

```

## (2) INFORMATION FOR SEQ ID NO:1129:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```

GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCCTCCC GACGGGACAC    60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC    120
GGACTGTACC CCTCACCCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA    180
GATTGCCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCCCTG CCCTAGAGGC    240
GTCTCGCTG CCCCCACCG ACCCTGGCT CGAG    274

```

## (2) INFORMATION FOR SEQ ID NO:1130:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```

GGCTTTCCAC CTTCCCTGCG GAGATGAGGG TGGTGGCCTC CCTTTTGTG ACCCTTCCAA    60
GGGTGATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAATGATC TTAA1AAGAC    120
ACAAGCCTGG TTGTGATATT TTCTGATTC AAGTGTCTCT GTGGTCTTG GTTGCTTCA    180
GGAGAGAGTT CAAGCCTCTT ATGGTGGTTT GTGAGGCCAG GCCTGAAC TA GCCCCATCGT    240
CTGTTCAATC ACCACCCAG TATCCCTGCT GCAGGTTTTT AAAGATCTCA TGTCCCTGAT    300
TGCTGTGAC TGTGTCTGAC TCGAG    325

```

## (2) INFORMATION FOR SEQ ID NO:1131:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```

CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCACG GCCTCCATAT GCAGGATCCT CAGGGCCTCG GAGATCTGCG CGCTGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACCT CAAAGTCCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGGCGA GGTTCGGGCA ACACTCCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTTGGTC GAGAAGAAGC TCAGGATCTC GGGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCGG GAAAGCCGTT      480
TCATGTAGGG GGCCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCCTGT      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639

```

## (2) INFORMATION FOR SEQ ID NO:1132:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```

GGTCTGTGGT CTGGAGGCT TAAATGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGGCG CATTTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCCTATCTG GCATTTCCAT CTTGCCCTG GTACACAAGT CACTGGCCCTG GAACTCAGCC      180
TTGATTCACT GTCCGTCTTC ACGGATTAGC TGTGCTGTTA TGTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCTGCTT GGAAGACTTG GGGGACTGCC      300
GAGCATATCA AAGTGTTTAT AGTCACCAAG TGAAGTGCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448

```

## (2) INFORMATION FOR SEQ ID NO:1133:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```

GAATTCGGCC TTCATGGCCT AGGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240

```

```

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA    300
TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTCAGAGC TCATCGATAT    360
CAACATCTCG AG                                     372

```

## (2) INFORMATION FOR SEQ ID NO:1134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 452 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

```

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA    60
TTTTTAGTGC ATAATATTAA ATGGCAAAAT CAAATTTCCC AACAAATATAC AAAATAAAAT    120
CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAATT    180
CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT    240
AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT    300
TTTTATCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTTGTATAAT    360
TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT    420
CTTAGGTCCT TTTTGGGTAT TTCTCCCTCG AG                                     452

```

## (2) INFORMATION FOR SEQ ID NO:1135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

```

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG    60
AGAGGAGGTA GGGGAACCAGA TGGGGAGAAT CGAGCCAAGT TCTGGGTTGG AGGAACTTT    120
CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG    180
GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTTGTA GGTGCGAAAG    240
TCAAGGTAAA TGGCTGTTT TTAGGAAACA ACTGATCCTC GAG                                     283

```

## (2) INFORMATION FOR SEQ ID NO:1136:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

```

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG    60
TGGATGAAAT ATTTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA    120
CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG    180
CATTTATTAA CACAGCCTTA CATTTGCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA    240

```

CTTATGTCCC AGCTGGGTCT CGAG

264

## (2) INFORMATION FOR SEQ ID NO:1137:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

GAATTCGGCC TTCATGGCCT ACCACGTTTC CTCACCTGTA AAATGGACAC TGCAGCTATG	60
TCTGCTGTTT CACATTGTTG ATAGAACTGG ATGCTGTGGT GACATTTGGG ACACATATCAT	120
GGTGCCTGGG GTGGGTGGGT GCCCAGGCCT GTGGGCTTCT GTCTTTCATC AAAGAACTTC	180
AGATCCCAGA AAATTAAGAT TCTCAAAACA TAACTGTCGG AAAGGGCTTT TGAATCCACC	240
TTGGTGGCCT CTTCCTGCCT CCAGGGCTCA TGAGATAGGC TGACTTCATA TGAAAGTTT	300
GAGGATGAGG AAGTCTCTCT CCTCTTCAGA TACTGACCT CTCTCTCCTT ATTTCTTGG	360
TGCCCAGAAAT AGGGCTTTGG TTATCTTGAA TGAATGAATA TAAACTCACA GGTGTGATCT	420
GAGCCACCTA AAGCCCTCTT TGGGTTCTGC TCAGCTTGAG GGCATCACCT AAAGGCCACT	480
GGCTGCATT TCCAGGAGGT GTTTTCTAAG CTGTATCTAT ATAGGAATGG GGAGGAAAGC	540
TAAGTCATTG TAGACTGAGA GAAAGGGAAT AAGAGTCTGT TCCAGACCAG CTAGGGCTGA	600
CAAGCTTAGG CAGCTGGGGG CAGAGGGCAC TGAGAAATGAG GCCCTAGCTC GAG	653

## (2) INFORMATION FOR SEQ ID NO:1138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC TTCATGGCCT ACAAAAGGTT CTGTATGACC ACCACAATCC TCGCTTAATC	60
AAAGATCTTC TGCAAGACCT AAGCTCTACC CTCTGCATTC TTATTAGAGG AGTAGGGAAG	120
TCTGTATTAG TGGGAAACAT CAATATTTGG ATTTGCCGAT TAGAACTAT TCTCGCCTGG	180
CAACAACAGC TACAGGATCT TCAGATGACT AAGCAAGTGA ACAATGGCCT CACCCTCAGT	240
GACCTTCCTC TGCACATGCT GAACAACATC CTATACCGGT TCTCAGACGG ATGGGACATC	300
ATCACCATT CCGAG	315

## (2) INFORMATION FOR SEQ ID NO:1139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC AAAGAGGCCT AGTTAATACT TATTTTATTT TCTGTTTTTA TCATCTAGTC	60
AACTCGCAA CTTCCAGCAT TTGTCTAAAT CTAATCAATA TATTCCAGTA CATCAGATAA	120

```

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATT 180
TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGGAACTTC CCTTCATCAT 240
TATTCAGAGT GTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT 300
CGAG 304

```

## (2) INFORMATION FOR SEQ ID NO:1140:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTGT TTGGTTGGT TTTAGTTTT TGTGGGAGAA 60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTTGT CAGTTTTGGT AATTGTGTGTC 120
TTTtagGAAA ATTCATTTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTCAGAA 180
TATTCCTTTA ATATCCTTCT AATGTCGTGA GAATCTAATC TGTATTGCAG TCTCTTCATA 240
TTGGTAATTT GTGTTTTTTC TATTTTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAAGTC 300
GAG 303

```

## (2) INFORMATION FOR SEQ ID NO:1141:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

```

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC 60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT 120
ATGGAAGTAT TAATTTCTTT CTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC 180
CTCTGCTCCA GTTTCATAAG TTTCTTTTGT GCTTGTATCT GTTTAGGATC AGGTGATATG 240
GCTTCATTTT TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC 300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG 330

```

## (2) INFORMATION FOR SEQ ID NO:1142:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

```

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG 60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC 120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC 180
AGCGACCATA TAAAAGCCTC CTGCCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC 240

```



ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

## (2) INFORMATION FOR SEQ ID NO:1143:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC	AAAGAGGCCT	AGTTTtagTT	CAGAATAACA	TTAATTTTGA	GAGATTGAGG	60
TAAAGAACCT	TAACATATGC	TAAGGAGTTT	ATTTTGATTA	ACATAGGTTA	TTCTGACCAC	120
CACCTCTTCC	TTCTTAATC	TCCTTAGAAT	CTGACAGTCT	CAAAGCTGTC	ACACAAATTA	180
GACTAATTTT	GACACTTTGA	AATGAAAAC	TCAAGGAAGA	AGTAGCCACG	GACAGTTATG	240
TTTATAATCA	GTAGGTGGCA	CTCTTCCTC	AGGTAGCCCC	CCATTTTCAC	ATGATGTGTT	300
TGAAGGTAA	ATGCCACCAA	AAGTGCTCGA	G			331

## (2) INFORMATION FOR SEQ ID NO:1144:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 508 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC	AAAGAGGCCT	ACTTCAGCAT	GACTACTCAG	TTGCCAGCTT	ACGTGGCAAT	60
TTTGCTTTTC	TATGTCTCAA	GAGCCAGCTG	CCAGGACACT	TTCAGTGCAG	CTGTTTATGA	120
GCATGCAGCG	ATATTGCCCA	ATGCCACCCT	AACACCAGTG	TCTCGTGAGG	AGGCTTTGGC	180
ATTAATGAAT	CGGAATCTGG	ACATTTTGGA	AGGAGCGATC	ACATCAGCAG	CAGATCAGGG	240
TGCGCATATT	ATTGTGACTC	CAGAAGATGC	TATTTATGGC	TGGAACCTCA	ACAGGGACTC	300
TCTCTACCCA	TATTTGGAGG	ACATCCCAGA	CCCTGAAGTA	AACTGGATCC	CCTGTAATAA	360
TCGTAACAGA	TTTGGCCAGA	CCCCAGTACA	AGAAAGACTC	AGCTGCCTGG	CCAAGAACAA	420
CTCTATCTAT	GTTGTGGCAA	ATATTGGGGA	CAAGAAGCCA	TGCGATACCA	GTGATCCTCA	480
GTGTCCCCCT	GATGGCCGTT	CGCTCGAG				508

## (2) INFORMATION FOR SEQ ID NO:1145:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC	AAAGAGGCCT	AAATTGCTGG	CGGATTTAGA	CCGGTAGAAA	ACCCGGGATG	60
GTTTATTTTG	ATTGAGCCCC	CTCTGGGTGG	CAGAGAGGAG	GCTTGGGCTC	TGGGCCCTTT	120
ACGTTTGAG	AAATGGCTTT	ATCAGCTCAG	TTGAAAGGTT	TTCCCTCTA	GCTAGTGAAA	180
GATAAACTTG	GAAATGCAGG	TTTCTCCAGC	GGTTGGTGGT	GGGGACAGGG	GTCGCCTAGG	240

GAAGTTGCAG	GGGCCGCGGC	CTCTGTTGTG	CTCTTCTGGA	GAGTGCAGTG	TTTGTGGAAC	300
TTTTCTAGAG	TGGCAAAAAC	GATCTCCACT	GTCGGTGAAA	GGGCAGTTCC	TGAAGTCAGC	360
TCATGGTCCT	GGCTCCCCTT	CTCCCCAGCA	GTGAACTGGG	GGTGACTTCC	TGATCTGCCC	420
AGCACAGGAG	AGCCCCGCAA	AGCGCCTGGG	AGGCCCTCGA	G		461

## (2) INFORMATION FOR SEQ ID NO:1146:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCGGCC	TTCATGGCCT	ACCATTTTGG	ATTGATTTTT	GTGTATAGTG	TAAGATGAAC	60
CCAAATTCCT	TCTTTAGCAT	GTGGGAATTC	TGTTTTTCTG	TCACCCTTTT	TTTTTGAGAT	120
GGGGTCTCAC	TATGTTGCC	AGGTTGGCCA	TGAACTCCTG	AGGTCATGTG	ATCCTCCTTC	180
CTCAGCCTCC	TGAGTAGCTA	GGACTACAGG	CATGTGCCAC	TGTGCCTGGC	TCCAGCAACA	240
GTTGTTGAAG	AGACTGTTCT	TTATTTACTT	ATTGTATCCT	CTGTGCTCGA	G	291

## (2) INFORMATION FOR SEQ ID NO:1147:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCGGCC	TTCATGGCCT	ACCCACCTGC	CCACGCCGAC	TTGGGAGGAT	GGTGGCCTGC	60
AGCGGCCAAG	AAGCCAAAAA	AAAAAATTTT	TTTTTTTTCA	GATACTGTGC	TTGATTTTTG	120
GAGAGGGGAG	AGGTGGAAT	TCCTAAATGG	CTAATGCACT	GTTCCCTCCA	GCCCGAATGC	180
CTCCTGCCAA	ACCCCTTTTC	CCTGCTGCCT	CTGTCCCCGC	ATCCTTGTTT	TCCCCTGGGT	240
CCGAAACATT	TTTTCCGAGG	ATGAACAGGG	GACATCTTTA	GGTTTCTCAA	CTCTTGCTTT	300
GGTGTGTTGC	GCAGCATGGA	AAACAGGCAC	CCCTCGAG			338

## (2) INFORMATION FOR SEQ ID NO:1148:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GCAGGAATCA	GATTCAGTCA	TTAGTAAGCC	GCACTCGCTG	AAGGGGAGAG	CATGAGCAAG	60
GCAGACGTGA	GCCACTGCGC	CCGGCCTGAA	GAGTTTTTGC	TAATTGGATA	TTAGGGAAAA	120
CCACAGGATG	GATTAAGACA	AGAGAGGGAA	GGTAAGGTTT	TAGACAGCAG	GATTATGTCT	180
GTTAGTTGGT	TTTATGTCAC	TTTTCTAGCC	AAGCTGTACC	ATCCTGTTTT	TGTTGGTTGG	240
TGAATGCTTC	CAGCTCTTTT	CCTCCAGCCC	TTGGAAGAGG	TGGTCCTATA	ATTGTTAAGC	300

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAGTTGA AGGCTGCAGG 360  
GCTCTTTGCA GGCGGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60  
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120  
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGTG 180  
AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240  
CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300  
GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 419 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60  
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120  
TTCCCAATT TTTCTTTTGT CTCTTTGCTT TATTCTGGT GTTTATTTT CCCAGGTGT 180  
ACTGTTTCT ATAGCCAAAT TATTGATCTT TTCTTAAAT GCTTTTGTG TCACTCAAAG 240  
GAAGGTTTC ACCACTGAGA GGTTATAAAA TAATCACTC ATATTTTAC TCTTTTGT 300  
TGCTTATGTT AATTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGT GTGAGTACGT 360  
TGCAAATAAC TTGTTTTC CTTATGCATT TCAGAGTAAG TTACCAGTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTGACA GTGTTTTGA TCTCCTGCAG 60  
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT 120  
TCCCTGGCA GGCCTTGGCT CCCGGCTCC AGAAACACGA TTTGCCTGCT TTAGAGCTTC 180  
TGCTGCCAAC TGGGCCTTCT CTTTTCCTT CTTTTTCAGC TTGTGCCGGG CCCGCTGGC 240  
GGCCCTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCG CCCAGGGTGC CCCCCTTCAT 360  
GGGCAGCTCC TCTTTCCGCC TGGTCAGCCT CGAG 394

## (2) INFORMATION FOR SEQ ID NO:1152:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60  
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120  
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCCACGC CGCAGTCAGA 180  
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCTACT GCACAGGTGA GCTTGCCCGT 240  
GCGCTCCTGA AGCAGGCGCA CGATCTGGGC CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300  
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC 360  
CTCAGGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420  
CTCGAG 426

## (2) INFORMATION FOR SEQ ID NO:1153:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTGCACCAT GCCAAGCATT 60  
CGGCTTGGAT TATCCCATTT GTTCTCACA GCCGGTATTT ATTGTCTGCT CCTCTGTGCC 120  
AGGTGCTGTG CTCTGGGCGAG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180  
CTGATGGGTG AGGCTGACCC AAGCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240  
CACAGGGGCC TCATACCATA TGTCTCGAG 270

## (2) INFORMATION FOR SEQ ID NO:1154:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60  
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120  
GTTCCAAGAA TCTACCGGCC CCCTCCTTAT CCCCTCCAA AAATAAGCCA TGCACACAG 180  
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCG GACATCACAA 240  
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

CCACAGCCTG	ACGTGGCCAA	GGACAGTTGG	GCAGCAGAAC	TTGAAAACTC	TTCCAAAGAA	360
AACGAAGTGA	TAGAGGTGAA	ATCTATGGGG	GAAAGCCAGT	CCAAAAAACT	CCAAGGTGGT	420
TATGAGTGCA	AATACTGCCC	CTACTCCACG	CAAAACCTGA	ACGAGTTCAC	GGAGCATGTC	480
GACATGCAGC	ATCCCAACGT	GATTCTCAAC	CCCCTCTACG	TGTGTGCAGA	ATGTAAC TTC	540
ACAACCAAAA	AGTACGACTC	CCTATCCGAC	CACAGACTCG	AG		582

## (2) INFORMATION FOR SEQ ID NO:1155:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC	TTCATGGCCT	AGGATCCGTG	AGGGAGACCG	CATCATCCAG	ATTAACGGTG	60
TAGAGTCCA	GAACCGGGAA	GAGGCGGTGG	CCATCCTGAG	CCAGGAAGAG	AACACCAACA	120
TCTCCTGCT	GGTGGCCCGA	CCTGAGAGTC	AGCTGGCGAA	AAGGTGGAAG	GACAGCGACC	180
GGGATGACTT	CCTGGATGAC	TTTGCTCTG	AGAATGAGGG	GGAGCTGCGT	GCTCGTAAAC	240
TGAAATCACC	CCCTGCCCGAG	CAGCCCGGAA	ACACTCGAG			279

## (2) INFORMATION FOR SEQ ID NO:1156:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC	AAAGAGGCCT	ACATTGTTAA	TATAATTAA	CAGAAGTTGT	GAAACTAAAA	60
TTTTCTAAGA	TTAACTGGTA	GTTCAATTGA	AATGAACATA	ATGAACAGAA	TTTATGACTC	120
CACTGTGGAA	AATGCTATCA	AATAACTAAG	GAATATATAT	GGAATAAGTG	TACATATGTA	180
AAATATTGTT	ACTAGAGTTA	GATATGTGCC	AAAGTCCATT	TATCCCAAAT	CCTGTCTGAA	240
AAGGAGGGGT	ACATTGGTAA	ACATTTTGGA	GTGCTTAAAA	ATGCCAAAAA	CAAAATGGTA	300
ATTTCTACTT	TGATAAAGTA	AAAAAGTTAA	ATGTGTGTAA	AAAAGTGCTC	GAG	353

## (2) INFORMATION FOR SEQ ID NO:1157:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC	TTCATGGCCT	ACGGTGGCCT	TTGGGGCCGA	AGTGGGCGTG	CGGCTCGCGC	60
TGTTTCGCGC	CTTCCTGGTG	ACGGAGCTGC	TCCCCCGT	CCAGAGACTC	ATCCAGCCGG	120
AGGAGATGTG	GCTCTACCGG	AACCCCTACG	TGGAGGCGGA	GTATTTCCCC	ACCAAGCCGA	180
TGTTTGTGCG	TGGAGAAAGA	TCGTCTTTCC	TCCCTCCCCA	TGACCGGGCT	TCCCGCGGCG	240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300  
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 178 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60  
GTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTGTAC TATTGGTGTG 120  
TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60  
CTGGAGTTCA AGACCAGGT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120  
CTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTGCCC TTTGACTTCT 180  
AATATTATCT TATATTCTCT CTCTTCAA AGATCAGAAG CACATGCTGT AAACATCAAT 240  
CATGATCATC TTGTCTCTCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300  
CATACCTTAT CTTTTTCCTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360  
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 350 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60  
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGGCAGGAA 120  
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180  
TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240  
CGTCCTCTGC AGGGGCTCTG AGGGTCCAGA GCTCCCTTCG GGTGGCGGGA AGCCAGTGGC 300  
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 597 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GCCCCGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTAC      360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTGCGGAGAG ACAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAATGGAC TATGGGAAG AACTAAGGAA CCTCGAG      597

```

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 476 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGTT GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA      240
ATGGTGACTG TAATCCCGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGGCGGAGGT TGCAGTGAGC TGAGATCGTG CCATTTCATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGAACCTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476

```

(2) INFORMATION FOR SEQ ID NO:1163:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCCTGCAGG ACTCGGCCCA GCTGGGTAACT CTGCTCAAGT TCAACTGCTC      120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCTG GTGCTGTGGA ACAACCAGCT      240
CACGCACACA GGCATGGCCT TCCTGGGCAT GACACTGCCG CACTCTCAGA GCCTGGAGAC      300

```

```

GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT      360
CATCAGCAAC CGCAGCGTGC TGGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGGGAGGG      420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCTGAGAC TGAACCCTCG      480
AG

```

## (2) INFORMATION FOR SEQ ID NO:1164:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCCT GTGGGTCAAC      60
TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC      120
TCTGCATTAG TTGGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTGGGTTAG      180
GTGGCTCTGC TGATTTTTCG CTGGACTTCC ACATTGGGA CCAGTTGGCT GTNATCAGCT      240
CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTCCTC ACATTCCTCA AGCAGGTACT      300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT      360
GCCATCTAAT GGGGAGACA GGCAAGTAAA CCAAAGACTA CACAGTGCAG TATGGTAAGT      420
GCCATGATTT TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA      480
GGGCAGACT CGAG

```

## (2) INFORMATION FOR SEQ ID NO:1165:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG      60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTTGGA AATCCAGTTT AGGCTGATTT      120
GAAAAGACAA CAGCATTTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC      180
CATTTTTTGT TTTCTGAAGA CGGCCTTTTT TTCTTTTSTA TTATTATTAT TTTTAAAT      240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG      298

```

## (2) INFORMATION FOR SEQ ID NO:1166:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT      60
GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG      120

```



AGTGGAGCCA GATTCAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA	180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG	240
ATTAATCTGA AAGGAGGTAA CTCGAG	266

## (2) INFORMATION FOR SEQ ID NO:1167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT	60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTTGGTCCT	120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG	180
TTTGAGAAGG TGACTGATGG TGGTGGAAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT	240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCCT TCATGCAGAA	300
AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAAACCATA CCAGGGTCAA TATTACAGTG	360
TCTCTGAAAT ACACTGAAAA TACTTCCTCG GCTCAGGTGG TGGCCCATGC TACCTCCAGG	420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA	480
GTTGGGCAGT CAACTCGAG	499

## (2) INFORMATION FOR SEQ ID NO:1168:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTTGTGG	60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTTAA AAACAATAAT	120
AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAAATA TATAGTTTGA GACAACTAAA	180
TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATTT TTTTGCCTGT GCTTTTCTTG	240
GCCTTTGTTT GCTTCTATTC TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA	300
TAACTTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC	360
CTATAGTACA ATTCCTAAAA ATAAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC	420
TCGAG	425

## (2) INFORMATION FOR SEQ ID NO:1169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AAAAGGTTTG ATCTTGTAAT GTGTCACGTG GTTTCCTTAG      60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTCC TTCCAGTCAG CCTGAGAGAG      120
AACACCTGTC CCCTAAGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA      180
CTAGAAGCTT CAGCCCGGAA GACAGGCTGC TCTCTCATGC TGGTGGCCCA AATTGAGAAA      240
GTGGTGTCCC TTCCTGATT TGCCACCAGC CCTACCGAAT AGTTGTAAAC CAGTATCAGG      300
AATTGGGATC CTCTCGAG                                     318

```

## (2) INFORMATION FOR SEQ ID NO:1170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GAATTCGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGGAAA      60
GTTTATCGAT ACTGGTTTCT CTTTACCATT CTACAAGCGT ATGTTAAGTA AAAAACTTAC      120
TATTAAGGAT TTGGAATCTA TTGATACTGA ATTTATAAC TCCCTTATCT GGATAAGAGA      180
TAACAACATT GAAGAATGTG GCTTAGAAAT GTACTTTTCT GTTGACATGG AGATTTTGGG      240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA      300
CAAAGATGAA TATATTGGTT TAATGACAGA ACGGCGTTTC CTCGAG                                     346

```

## (2) INFORMATION FOR SEQ ID NO:1171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATTCGGCC TTCATGGCCT AACTTTTATT CCCTTTTAAG TCTGGTAAAG AATGAATACT      60
TGGACGTTTT GTTTCATGCA GATTTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT      120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTTTGN TAGTCATATG AGGATGATGA      180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAAT TTGATATGAA      240

```

## (2) INFORMATION FOR SEQ ID NO:1172:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAATTCGGCC TTCATGGCCT AGTTTCNTTT TTGTATCTCT ACTGATATCA CCAGGATAGT      60
NTACTCTCCT TCTAGCTTTC TGCTTACCGC AACTGGGATA ACACACACAT ACACACCCAC      120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCCCTCCT      180
CCTCCTACTT CTCTCTTGA CAGCGAGGAC AGGAGGGGGA CAAGGGGACA CCTGGGCAGA      240

```

CCCGCCGGCT CTCCCCCACC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC	TTCATGGCCT	AGAAAAGTCT	AGAAAATAGC	TTAAATAACA	AACACGTGTG	60
GATTTGTTAG	ACCAAGAGCA	AGGGAGACCA	TTTAATGCAG	TTATTTAACA	ATATTTAGTA	120
CTTTCCTTTA	CCTTGTCTGC	TGTGCCATCA	TTCATGCCTG	TCAGTGTTAA	AAATCCCCAA	180
ATTTCCTAAA	CAGATTTTCA	TTTCACTTCC	GTCAACTTTT	AAATTAAAGT	TTTTAAATTC	240
CTGTCCCCAC	TCCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1174:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT	TTTGATGTCA	AAATGGAAAA	TGAAAAGTTA	GTTTTAGCAT	GTGAAGATGT	60
GAGGCATCAG	TTAGAAGAAT	GTCTTGCTGG	TAACAATCAG	CTTTCTCTGG	AAAAAACAC	120
TATTGTGGAG	ACTCTAAAAA	TGGAAAAAGG	AGAGATAGAG	GCAGAATTGT	GTTGGGCTAA	180
AAAGAGGCTG	TTGGAAGAAG	CAAACAAGTA	TGAGAAAACC	ATTGAAGAAT	GTCTTGCTGG	240
TAACAATCAG	CTTTCTCTGG	AAAAAACAC	TATTGTGGAG	ACTCTAAAAA	TGGAAGAAGG	300
AGAGATAGAG	GCAGAATTGT	GTGGCCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:1175:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 403 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAAATCGGCC	TTCATGGCCT	AGTGCTTGAA	CTCACGCATC	TGTTTTACCT	GCATCTGCAG	60
GCGATGGGGC	AGGGGCCACG	GAAAGAGTCT	GAGGGCTGCT	TGGTGTAGTC	AGGTTGTGTC	120
CAGGCATGCG	GAGCTGTGAG	TGCCTGCAGG	AGAGACACCC	AGGAGGAGTT	TTTACATTTT	180
GGTCTAAAAA	GCTCTTGGAT	TCATCTCATC	TCATGGAATG	ATCCTGTCGG	ATGACGCTGA	240
CGTGATTGCT	TCAGACTTAG	AGGTGAATAA	ATTGAGGTCC	AGAGAGGTCA	CAGTCACGAA	300
GCTCATGGTA	GACTGAGGCC	ACTAAACACC	CGTCTCCTGA	TTTTCAGTGG	CGTCCTCATT	360
TGCATACACC	TGGGCCATCT	TGGTTTTTGC	AAGAAAATC	GAG		403

## (2) INFORMATION FOR SEQ ID NO:1176:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTAACTGCC      60
TTGGTGGAGT CTTCTGATT TATTGAAGAG AATAATCACG AAAATAATTT TTGTTGTTT      120
TTTGAGACGG AGTCTCGCTC TGTCACCCAG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCCAG GTTCAAGTGA TTCTCCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTGA TTTTGTAGTAG AGATGGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCTT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTAT TATTTAAAAA AACTAAAAGG CGGCCTCGAG      590

```

## (2) INFORMATION FOR SEQ ID NO:1177:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTCAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAAACG CATCAGCACG TTGACTCAA CGCCCCCAAC GCCAGGGCAA      180
AGGCAATTTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCGGTT AATCGCGGTG CAAATAAGGG CAAGTCCCT CCCCTTGTC GTGTGGTCTT      300
GACAACGACA CTAGTTCATT CTACTAACAA GGCGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTCGGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

```

## (2) INFORMATION FOR SEQ ID NO:1178:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAACAAG CTGGGGCTTA TGGTCAGCAT      60

```

TGGAAGCAGG	GAGCAGAGTG	GGGAAAACAG	CAGTCTTATG	GGACTGAGTC	CTCAATCTGT	120
GTGATCTGAC	TCTATCTGCA	AGGTAGTGTT	GGAAGTGAAC	AGGGTTGGAG	AATGCCCAGC	180
TGGTGTCCAC	CGCAGAATTG	ATTTCATGTT	TGGTATGCAG	GGACCCCCCA	CTCCACACTT	240
AGTCACAGAA	ATCTGTGTTG	ATTGTTGTGG	CATGAAAGCA	GGGAAAAATA	GTTTGTTTTT	300
TTCTCCACAC	TTCCTTCCCA	AGATCCCGGC	TAACTCGAG			339

## (2) INFORMATION FOR SEQ ID NO:1179:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAATTCGGCC	TTCATGGCCT	ACTCACCGGA	GAAAAGAAGT	TTCNGAAGAA	AACCACAACC	60
ATGCCAATGA	ACGAATGCTA	TTTCATGGGT	CTCCTTTTGT	GAATGCAATT	ATCCACAAAG	120
GCTTTGATGA	AAGGCATGCG	TACATAGGTG	GTATGTTTGG	AGCTGGCATT	TATTTTGCTG	180
AAAACCTTTC	CAAAAGCAAT	CAATATGTAT	ATGGAATTGG	AGGAGGTACT	GGGTGTCCAG	240
TTCACAAAGA	CAGATCTTGT	TACATTTGCC	ACAGGCAGCT	GCTCTTTTGC	CGGGTAACCT	300
TGGGAAAGTC	TTTCTGCAG	TTCAGTGCAA	TGAAAATGCG	ACATCTCCTC	GAG	353

## (2) INFORMATION FOR SEQ ID NO:1180:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC	AAAGAGGCCT	ACAGAGTGCT	GTGCTTAAGT	TTTACTTCTT	TCCACCTTTA	60
AATCTCTGAT	AAGTTTCTTT	TTATCTAAAG	GTTCCACTTT	GTTCACTACT	TTTTGTTTCC	120
TTATTATTGA	TTGTTCGAG	AACCTGAGTT	TCTTGACCTG	TGTGATTTTG	TACCACCTGG	180
ACTTTCTGAC	TGTGTTTGCC	CAGGCTGGAG	AGCAGTGGTG	GGATCATAGC	TTACTGGACT	240
CAAGCCATCC	TCCCGCCTCA	GCCTCCCAAG	TAAC TGGGAC	TATGGGCACA	CTCGAG	296

## (2) INFORMATION FOR SEQ ID NO:1181:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC	TTCATGGCCT	ACTTGAGTTG	TACATTAGAT	CTTTAAACTT	GTTAGTCCTA	60
CATATCTGCT	ATTTTTTATC	CTTTGACCTA	CATTTTCCCA	TTTCTCCCA	GTGTCTCTC	120
CCCAGGTAAT	CATTGTTTTA	TTCCCTTTCT	CTGTAAATTT	GACTTTTTTT	TTTGGATTCC	180
ACATATAAGT	GAGATCATGA	TCATGCGGTA	TTTTTCTTTC	TGTGTCTGGC	TTATTTTACA	240

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

## (2) INFORMATION FOR SEQ ID NO:1182:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

```
GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT    60
AGCTGTAAGA TGCGCTCTAA TATCAGTCTC TGTTGTCATT TGCCTTTTCT CTGTGTCTGT    120
GTTCAAATGT CCTTTT TTTT TTTT GGGAGTCTTG CTCTGTTGCC CACTCAAAC    180
GCTGGGCTCG AG                                         192
```

## (2) INFORMATION FOR SEQ ID NO:1183:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

```
GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTTCTGTTA CATTGTTTAG AGAATAATGA    60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTT TTTT    120
TGAGACAGAG TCTCGCTCTT GTTGCCAGG CTGGAGTGCA AGGGTGGCAT CTCAGCTCAC    180
CGCAACCTCC GCCTCCCGGG TTCAAGCAAT TCTCCTGCCT CAGCCCCCG AGTAGCTGGG    240
ATCACAGGCA TGTGCCACCA CGCCGGCTC TTTTGTATT TTTAGTAGAA CTCGAG    296
```

## (2) INFORMATION FOR SEQ ID NO:1184:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

```
GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCGG ACTACTACAG    60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT    120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTCGGACTA CTACAGGTGC    180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG    234
```

## (2) INFORMATION FOR SEQ ID NO:1185:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTCGGCC	AAAGAGGCCT	AGAACAGTTT	AGAAACAATT	TCCCTGCCTT	TGCTTTGGGT	60
TCCCTGTGAT	TGTTCTCCAC	ACTGTTTTCC	TGGCTCTATC	TGTCTCCCTT	GCCACGGCCA	120
CTCAAGCCTA	GCTGCCCAAC	AGTCCTTCC	CTGAAGAACC	CCGGCCTTCA	GGCTTGACAG	180
GTGATCTCAT	CCCTCTTCTT	TTCTCCAGG	TTGTTGTAGA	CTTCCACCTT	CCCTTCTTCT	240
CCTGGTCCTT	TCCCCTTTCT	AGTGCCAATG	TGGGCCACGC	TTTCATCCCA	CCTACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GAATTCGGCC	TTCATGGCCT	AGTGATGAGC	CCTCCTCTTC	AGCTAGGAAA	ATGACGGTGT	60
TCAGAAAGTT	AAAACCTTCT	CGCTGGAAGG	ATTTTCATCT	AAAGTTGGGA	GACTGGAAGA	120
AATTAAAGTG	TTCTAAATGG	AAGAGCATT	ACCACATGTG	TTCTGTTTGG	GGTTGACATT	180
TAGCTTTTGT	TTTTATTTTA	GAAACGGAAG	ACTCTGGTAG	CAGTCCTTGA	AATCTTGATG	240
CCATTGCTAT	TTTCTGCATT	GTATTGTATC	TTCGTTTTAG	TAGTGCTCCA	ATAAAAAGAC	300
CTGCTACTAG	CTGCAAACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC	TTCATGGCCT	AGTACGTTGC	TGAAAAGAAG	TTTATTGCTA	TTTTCTTATT	60
TTATTATACA	AAACTAGATT	TGCTTAAAC	ATTTCCAGT	CTCTTTAAAG	GAATGCTAGT	120
TAGTGGGAGG	CCACAGCTAG	TAAATTACCC	TCAGTAGTGG	TTTCAAGTAG	TCCATAACTA	180
TAAAAATCGT	TACGGCCAGG	ATATGCCGGA	ACAGAACT	CCCCACTGGG	GTCTCAGCC	240
TTGGATGTCA	GCTCGGCCCC	TCAAGGGGTC	CCTACACCTG	GAAGCTGATT	CCACTCATCA	300
GTCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```
GAATTCGGCC TTCATGGCCT AGAATGAAGA AGGTTCCCAA GAAGTTAGAG GAGATTCCCC    60
CAGCCTCTCC GGAGATGGCA CAGATGAGGA AGCAGTGCCT GGACTATCAT TACCAGGAGA    120
TGCAGGCTCT GAAGGAGGTC TTCAAGGAGT ATTGATTGA ACTGTTTTTC TTGCAACACT    180
TTCAAGGGAA CATGATGGAT TTCTTAGCTT TCAAGAAGAA ACATTATGCC CCATTACAAG    240
CACCCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

```
GAATTCGGCC TTCATGGCCT AAGGAGTTGG AAATTGTGCA CAAAGAAAGG TGGTGAATAA    60
GTAAAGTCGT AAATTCAAGA CCACAACAGA AAGCTTCACT GCAGACACTG GACTTGAACC    120
ACCATTGAAA ACAGTCAGGA TTTGGAGATG ATAATTAGGA GGATGTGTAT TCTAGCTGTG    180
GAATTTATTG TGGGCAAGCA TAGGAATGAG AAAGTACAAT GAAAAAATGT AAGTAGACCC    240
ACCAAGTTAG AGAAGAAGGT CCTGGTTAAG AAAAATGAAA GATTTTTTTG AACACAGAT    300
TAATGTGATG AAATAGATGT TCAAGAGTGA AGATAAGTTG AAGATAGGGA CCCCTCGAG    359
```

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

```
GTGTGTTAGG TGGTGTGTT ATGTTGCTGT TGTTATGCTG GTCGTGCTGC TCCATGTTCT    60
CCAGGTGTTT TTCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG    120
CGCCTGGGGT CTTCAGCCTA AACACACCTA AACCTCCAC CAAACCCCTC TGCTTCCGCC    180
TCCCCGTGTC TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCAGGCCCCA TTTCAGGGC    240
TCGAG                                     245
```

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:



GAATTCGGCC	TTCATGGCCT	AGTCTCAAAA	AAAAAAAAAA	AAAATAGTGT	TCAGCAAGGT	60
TGAAGCATAA	AAGGTTAATA	GCCAGAATCA	TTTATCAATT	GTATTTCTAT	ACATCTACAA	120
GACACAATCT	GAAAATGAAA	TTAGAGAAAC	AATTTCACTG	GGCAACAAGA	GCAAAACTTC	180
ATCTCAAAAT	AATCATCATC	ATCATCATCA	TCATCATCAT	CATCATCTAC	AATGTCATT	240
CCCATCCAAC	GCTCGAG					257

## (2) INFORMATION FOR SEQ ID NO:1192:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC	TTCATGGCCT	AAGGACATGG	CAGAGTTCCT	GCTAAAAGAG	AAGACAGTTA	60
TTTAAGGAGG	TTTGAGATTC	AAGGGCTTTT	TTAATTTTAA	AATTAACCAT	GGTAGAAACC	120
TGTGTGTAA	TATGCTGAGG	GAAGTTGCCA	ATAGTGAGAT	GAAAGATCTA	GGCAAGGGGA	180
TAGCAAGGTG	ACTGCACCAG	ATACCTGGAT	CTGGGCAGGA	ATAAACCTCA	ACAGTGATCA	240
TGTTGACCTT	GAGTGACAGG	GTATAATGTT	TGGGAAGGTG	CTTTGTAAAC	TATAAGGGGC	300
AATACAAACA	TGTAGTACAC	CTTCTCTGAG	ATCCGGGAAA	GGACAACCTG	AGCATAGGTT	360
GGGGCTGGTC	ATAGGCCACT	CTCCCCTACT	GTTTCTCTAG	AGTGTGTGTA	GTCCCTAGCA	420
AGTCTCAGAT	GCCTCGACCT	TCATGGCCTA	GAGAGTTCTC	ATCAGAACAG	GAAGGCAGTG	480
ATGATCCATT	GCATGGGCAG	GATTGTTCTA	CGAAGACGAA	GATCTCCGGA	AAGTGAAGAA	540
GACCCGGAGG	AAACTAACCT	CAACCTCTGC	CATCACAAGG	CAACCTAACA	TCAAACAGAA	600
GTTTGTGGCC	CTCCTGAAGC	GGTTTAAAGT	TTCAGATGAG	GTGGGCTTGT	GGCTGGAGCA	660
TGTGTCCCGC	GAGCAGATCC	GGGAAGTGGA	AGAGGACTTG	GATGAATTGT	ATGACAGTCT	720
GGAGATGTAC	AACCCAGTC	GACTCGAG				748

## (2) INFORMATION FOR SEQ ID NO:1193:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTGCGAA	CATGGCAGCG	CGTTGGCGGT	TTTGGTGTGT	CTCTGTGACC	ATGGTGGTGG	60
CGTGCTCAT	CGTTTGCGAC	GTTCCCTCAG	CCTCTGCCCA	AAGAAAGAAG	GAGATGGTGT	120
TATCTGAAAA	GGTTAGTCAG	CTGATGGAAT	GGACTAACAA	AAGACCTGTA	ATAAGAATGA	180
ATGGAGACAA	GTTCCGTCGC	CTGTGAAAG	CCCCACCTAA	TCTCGAG		227

## (2) INFORMATION FOR SEQ ID NO:1194:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```

GAATTCGGCC TTCATGGCCT AGTATATATA TAAATACTG AGGATTTAGG GCTGATGTAT      60
ATAAATAAAA TACTGATAAC TTTTTCCTT TCTTTTCTT TTTTTTTGA GATAGTGTCA      120
TGCTCTGTTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAAGTGCAG CCTGCCCCTC      180
CCAGGCTCAA GCAATCCTCC TGCCTCAGCA CCCTCAATAA CTGGGACCAC AATTGCATGC      240
CACCAAACGC ACCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1195:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GAATTCGGCC TTCATGGCCT AATGAATTCT CATTTCCTGG AGGCTGAAGA TCTGTGCAGG      60
TGTCTGTGGC CAATGTTAAG CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT      120
TTTCTTGTCT GTGTTCCCTC TGAATTCTC TGTGCTGTTA GAGGCAGGGA CAGAAGAGAA      180
CCAGCATGGC AGTGTGGGTC TCAGGGTGAT GCCTGCCTGC CAGCACAGCG GTTCTTGTCC      240
CTGTCCACA TTGCTTCTTG GAAGCCTTTT TACAGCCTCA ATCATCTTGC TTTTCTACC      300
CGAGCTATCT CGAG

```

## (2) INFORMATION FOR SEQ ID NO:1196:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCC TTCATGCGGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA      60
GCTCCTCTAT CTTCTCTTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC      120
TTCCTCTGCT CCAGGCTGGC CACCGACTCC TGACGCGCCG TGGGCAGCCG GGCCTGCTC      180
TCCCGCCGGG TGTGAGCTC CATCTCCAC CTCTTCCCGT GGGCAGCTCT CTGCGTCGAG      240
GCCGCTTCA GCTTGTGGTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCCTGAGAG      300
GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGGAGT AGAAGATGGG GCTCCATGCC      360
CGGATTCTCG GGATTATTAC TCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1197:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTTGCAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGCAAAA GAGCAAGACT      60

```

```

CCATTTCAAA AAAAAATCTT AAAAAATACGA AGTTTTTCAT TTTTCTTAAA TTTTCATTGT      120
GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA      180
TCTGGAAAGT GGTCAATTATT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT      240
GATACAGGTT CTCGAG                                         256

```

## (2) INFORMATION FOR SEQ ID NO:1198:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG      60
GCAAAATGGGA TGTGTCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC      120
TGCAAACCCA CGTGCTGGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA      180
CTGCATGGAA TGTACAGTGG GGTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCCTGG      240
CCACGTGTGC TCTGTGGTCT TTGAAGTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT      300
GAAGGCCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG      360
ATTAGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATT CAGAGGAAGA      420
GCAGTGGGGC AAGTGGCTC CTCGAG                                         446

```

## (2) INFORMATION FOR SEQ ID NO:1199:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA      60
CTCACTACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA      120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA      180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT      240
GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA      300
CGGTGGCACG TTTCTGGTCC CAGTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT      360
CCGCTCGAG                                         369

```

## (2) INFORMATION FOR SEQ ID NO:1200:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT      60

```

```

TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA 120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG 180
AGGGAGGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG 240
GTCATTGGAG GATTCGGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT 300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG 360
AGACTATCCT TGTAAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGGT AGTAGCAGTG 420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC 480
GAG 483

```

## (2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGTGTACAA ATTCAGTGAC TTTTAGTAAA TTCACAGTTA 60
TATATTCAAT AGGATATTCA GAGTTATATA TTCATCACC CAGTCACTCT TAGAACATTT 120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT 180
CTACCGCTCG AG 192

```

## (2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG 60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC 120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTTNTGTGA ATATGAATTT GTACCTATAT 180
TCAGAAGAAA AGAGCAATAT TGGCACAAAA CAAATCATCT TAATAAGGTA ACTAATTGGN 240
TGNGTGCAGT GGCTCACGCC TGTAATCGCA TCACACTCGA G 281

```

## (2) INFORMATION FOR SEQ ID NO:1203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA 60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA 120
TAAATATTTT TTGTTTCTCT TTTTGACAAA ATGGATTTTC TTCAGTTTCT TAAGCAGATG 180

```

TATTATTTCT GGGACGTTTT AGCCATGTAG TTTCTTTTA TTCCTCTTG ATACCCTGAA	240
TAAGTAGCCT TAGAAACACA AGTAAAGCTC CCAAAATTC ATTTTCTACA TATTTTATTA	300
CCAGATTGAA TTCTAGACCT GCCTCGAG	328

## (2) INFORMATION FOR SEQ ID NO:1204:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA	60
TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG	120
TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTTTAA	180
CAGTTGACAT ACTTATTTGC TCATTTTATA ATTGTAACAA CCCTATCAGA TAGGTACTAT	240
TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT	300
GCTCGAG	307

## (2) INFORMATION FOR SEQ ID NO:1205:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA	60
CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTTAATA AAAAAGAATA	120
CTTTGTATCT TTTGATGTAA CTTCCTTTA GAGATTCTGT TTCCCCTGTC TTAAATTGTC	180
AGGCTATTTT TGATTGCTGT TTAAATAATT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA	240
AAAAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG	300
ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGT TATTGTAGGT TTGTTCAAGT	360
CAGTACTGCC CATCTGGCA CTTAGGTTCT TGAATACAG AGGTGGATAA GGTTCGCCCC	420
TCGAG	425

## (2) INFORMATION FOR SEQ ID NO:1206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GCTGCGCTGC	60
TTCCAAAATG GAAAAGCATC ACAACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC	120
CCTACGTAGC CCTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG	180

```

GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCCACACACC TGGAAAAGAG GACACCCAGC      240
CCGNGGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCCAG      300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC      360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA      420
GCTGCAGGAG GAGGAGGATT TGAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC      480
TGTGCCCCCC TCTAGGCCAT GAAG                                          504

```

## (2) INFORMATION FOR SEQ ID NO:1207:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTAAAC TAATAATTTA ATCATTCTAG TAAGAAAACA      60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT      120
ATGATCACCC ACGACATTGT CCTAATTGT CGACTGTTCT GTGTGCTCTT TTAAAGAAGG      180
TAGTCTGTTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG      240
AG                                          242

```

## (2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 152 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTACTTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CCTAGGCTCG AG                                          152

```

## (2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTCAC TAACGTGAAT GTGGTGCTAA      60
TTTTCCAGT CCATATCTTT GAACTTTTGT TAATATATGC ACATCAATAA GCAATCGAGT      120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTTGTTTCT      180
TGCAATGGTG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC      240
CCATTAAC TAATTCTCAAT ACTTCTGAGT CTTCTTGTC TATGATTCCA CTCTCTACAT      300
CACATGTACA CCTCGAG                                          317

```

## (2) INFORMATION FOR SEQ ID NO:1210:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GACAGATTC ATTACCTTGA AGTTCCTGTC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTTA GACTTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGTCATGG AATGTTTGGC TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                                282

```

## (2) INFORMATION FOR SEQ ID NO:1211:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGCCTC ATCCCAGGGT TTAATCCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACT AATGGATCTA ACGCCACACC      180
TAGTGAAGAA ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGG AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTTCT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG

```

## (2) INFORMATION FOR SEQ ID NO:1212:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAACCTGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCTT GCCACCATAA ATCTCGAACT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACCATT CTTCATACTG CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGCTCTC GAG                                343

```

## (2) INFORMATION FOR SEQ ID NO:1213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

GAATTCGGCC TTCATGGCCT AGAGAACTA AAACCTCAGAG AAGTTAATTA CTGAACTCAA	60
GATCCCAAAG TGCTGGGATT GCAGGCGTGA GCCACGCGC CTGGCTGAAA GAGCTTTTTT	120
AATGTATTAT TTATTTGTGT CAGGATAGAC TCATTGATGC GTGTTTTATT CAGTGGGTTA	180
TAATTCTTTA TTATGTATTC TGATGTTGGT GTTTTCCCAG TTTTAGCCAA TGGCATCCCC	240
TTCCATCTGG ATCCTGTGTT CTTTGACAT GGCTCCAATC TCGAG	285

## (2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC TTCATGGCCT AGAACCAGGC CTTCCAGTAC GAGTTTGGAG CCATGTATGC	60
ATGGATGCTG TGTGTCTTCA CTGTCATCGT GGCCTACAGC ATCACTTGTC CCATCATCGC	120
GCCATTTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT	180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCCGCTGTGA ACCAGGCCTT	240
GGCAGCCCCC ATCCTGTGCC TCTTCTGGCT CTACTTCTTT TCCTTCCTGC GCCTGGGTAT	300
GAAGGCCCCC GTCACGCGAG	320

## (2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 446 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GAATTCGGCC TTCATTTTGA AAGATATTTT TGTAAAAATC TGTTTGTTTT CTTTAAATAC	60
TTTCCAGTGT TATCTGGGTT TCTTAATTTT TGACTTAAGG TCTGTAATAA TTTCTGCTTT	120
CATTCTCTTT AATATATTGT GTCTTCTTTT GTCTACATTT AAGATTTTAT CTTTATCACG	180
TGTTTTGAAA AGTTTATTTT TGATGTGCTC TTTATGTTTT TCTTTATTTG TAGTGCTTGG	240
ACCTTGTTGGT GCTTTTCTTA TTTATAATTT TCATCAAATT TGGGGGGTTT GACCATTATT	300
GCTTCAAAAA TAATCTCTGT TCTCTTCTT CACTTCTCC AGTTACATAC TGTAGAGTAA	360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAATATC ATTAATGCCT CTGAAGAGGA	420
GAATGACTCC AGTGGAACCA CTCGAG	446

## (2) INFORMATION FOR SEQ ID NO:1216:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```
GGACTTTTGG GAGAAGCAGT ACTATTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA    60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTT TTTT TTTTGGGATG    120
GAGTTTCGCT CTTGTGCGCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA    180
GCTTCCTGGG TTCAAGCGAT TCTCCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA    240
TACGCCGCCA TGCCCAACTC GAG                                           263
```

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```
GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA AAAAAACAT GTATAACTGG    60
GAAAAAAGTG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT    120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT    180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA    240
TGTAACTCAA TTCAGCATAC TTGATGGTTG TGGTAACCCT AGAAAATGAC TCCAGGAAAT    300
AGGTGAGAAT CCAATCTATC TCGAG                                           325
```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 293 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```
GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTTAA CTGGGTGGCA    60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA    120
ACCACCGCGG AAGACTCATT CGAAGTCGTG GGCTGAAGTC AACCAGGTCA ATGCTTCAGA    180
AAAATACCGG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA    240
TATTAGGATA CAATCCAAA TGTCTCATCA TAAGAAGACA GGAAAACTC GAG                                           293
```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```
GAATTCGGCC TTCATGGCCT ACGAGGATTG GGGTAGGTAT GNGCTTTNGG CTCATGTTTG      60
TGATGATAAC TGAAGTCTNT TGTGGGTCCG ACCTGTTGTA GGGTGTGGGG GAAAGTGAAG      120
GAAGAGAATG AAGGTGAGTC CCCGCCGTTG CAAACCTTCA CCAAACCACG CGGCCCAGTT      180
TTCGTGAGTA CCCCTGTGTC CCAGAGAGGA GGACCCAGCG TCCTCGGCTC TGCCGCAGGC      240
CTTCTTGGTC TGGTGGGTAC TCGAG                                         265
```

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```
GAATTCGGCC TTCATGGCCT AAGGAATTGA AACCCAGTAC TTTGCAGAAC TTCTTATGAC      60
TTCTGGAGTG GTCCTCTGTG AAGGGGTCAA ATGTTGTGCA TTTCATAGCG GTTACGACTT      120
TGGCTACTTA ATCAAATCC TAACCAACTC TAACTTGCCT GAAGAAGAAC TTGACTTCTT      180
TGAGATCCTT CGATTGTTTT TTCCTGTCAT TTATGATGTG AAGTACCTCA TGAAGAGCTG      240
CAAAAATCTC AAAGGGGGAT CTCGAG                                         266
```

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```
GAATTCGGCC TTCATGGCCT AGCTCATTCT GCTGGGGGTA GAGATGAGGG GAGGGAGTAA      60
GTTAAACCTT GGA CTAGCAA GTAGAAGCCT GGGGGGATGC GTGTGCCTCA GTTTCCTCCT      120
CCACAAC TGA ATATAGTGGC TGAAAAC TGG GGAGATACTT GATGGCGCGA ATGTCCGTTT      180
TCTCTCCCTT CCCACCTCCT GCAGGAAGCA GGACGGGGCA GGCAGCACCT GGTAGGCACA      240
GTGCTTTGCC CCTCCTCCCC TTCCCTTCTG GAAGTCTTGG GGCCTCAGTG CTTGCAACAG      300
CCACTCCTCG AG                                                         312
```

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATGTGCCCC AGTCACAGAA TTCATTTTAT TTGTGAAAAT      120
ACAGTGGTAC AAGTAGGCCT TTGTTAAATG ACTAACCTGA AACCTCTTGT GAATGACAAA      180
CTCCTCTCTA CTCCAAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTCCCC TTTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

## (2) INFORMATION FOR SEQ ID NO:1223:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTCTGCC TAAGGGAACA GCCCCGGCCC      120
CTCCCTCCGG CTCCTCCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATTT      240
GTCTGTTTTC TGGCATCCTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAAG CCTATGAGGG TTTTTCAC GATTCGGTTC      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTTGCCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

## (2) INFORMATION FOR SEQ ID NO:1224:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTTGTTTT ATATAATAAA GTATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCCTA AAAAAAGTGG CAACCAAGGA AAATATTTAG ATGCAAATAC TCGAG          235

```

## (2) INFORMATION FOR SEQ ID NO:1225:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC	60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCTT GCTCCTGTAA CAAAGCCAAC AAGCACAAGC	120
CACCGCATCT CGAG	134

## (2) INFORMATION FOR SEQ ID NO:1226:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT	60
CAGACAATCT TTAAATGAT GTTTGTATAG GGAACAGCTT TGGAAGATAA AGAATGTCTC	120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG	180
TAACAGTATT GGGAAAGTGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA	240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA	300
TAAAAAGAAT GAGTTTGGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC	360
TGTACTTCCA CCTGGAATGA CCCTCACCGG ATGCTGGTGC CATGCTCTTG GACTTCCCAG	420
CATCCAGAAC TTCTGTTTTT ATAAATTACC CAGTCTATGG CATTCTGTTA TAGCAGCAGA	480
AAATGGACAG AGACACCCCTC AAATTAAAGG ACAGTCTTGC TGACTATGAA TTAGAAAATA	540
TCTGGGTTAG CTCGAG	556

## (2) INFORMATION FOR SEQ ID NO:1227:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC	60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAAACTACCA	120
CCTACTTCCC TCACCAAAGC CCATAAAAAT AAAAAATTAT AACAAACCAC TCGAG	175

## (2) INFORMATION FOR SEQ ID NO:1228:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGC	60
--	----

```

AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC    120
TGTCATCACA TCGCCTTCTC TTGAGAAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTTGG    180
CAGGAACTTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG                                220

```

## (2) INFORMATION FOR SEQ ID NO:1229:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 526 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

```

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGAG ACATCTCTAT    60
TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA    120
CAAGCACTTG CCAGCAGGGG GCACTCCAGG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG    180
AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA    240
GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA    300
ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCCTCTTG TGGGGCGGAG AGTGGGGGTA    360
GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT    420
CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTAGCTCA CTGTCCAATC    480
GACTAAACA AGCTCTCCA GGGCTCGGGC CAACTGTCGA CTCGAG                                526

```

## (2) INFORMATION FOR SEQ ID NO:1230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

```

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC    60
TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC    120
AGCATGATTC CAATAGAGAA GGCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC    180
CATAACTGGA GAAGTGAGTT GTATGCCAA ACAGTCTCTG AACGTTACA GGCCCATGGA    240
AAGGAAAAAC CCCAGATCAT CTGTTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC    300
TTCCCCCTCG AG                                     312

```

## (2) INFORMATION FOR SEQ ID NO:1231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

```

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC    60
CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA    120

```

ACAGATCTTG TAAACCAACA ACAAACCCTG GAGGAGAAGA TCGGGAAGA CCGGGATAGC	180
CTGGTGGAGA GACTACACCG TCAGACTGCT GAGTATTCCG CATTCAAGCT GGAGAATGAG	240
AGGCTGAAGG CCAGCTTTGC TCCAATGGAG GACAAACTCA ACCAGGCACA CCTCGAG	297

## (2) INFORMATION FOR SEQ ID NO:1232:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 360 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG	60
AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT	120
GGAAAACTTG AAGACATTCC TGCCTTCTTT GAATTGGCCA AGAAGGTGTC TAGCCGGGTG	180
CCTTTGGAAC CAGGGTTCAA TTACTGCAGA GGTATCTACT GCTGGCACAT AGGGCAGCCC	240
AACGAAGCCT TAAAGTTCCT GAACAAGGCA CGCAAGGACA GCAC TTGGGG CCAGAGCGCC	300
ATCTACCACA TGGTGCAGAT CTGTCTGAAT CCAGACAACG AGGTTATGGT GCGGCTCGAG	360

## (2) INFORMATION FOR SEQ ID NO:1233:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 423 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTA CTGA ACT	60
TTTTGCCTGT TCTTTCCAGG TGTGACAGCC TTTCTTTTC TTCCAGGTG GTTCGCTTTG	120
AGGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTTGTGT GTCACCTTGC TTCCACGTTT	180
CAGTTCTTGT TTTGTTTCTA CTGCTTTAGT TTTTTTAAA GTTCTCCAGT GTCCCAAGA	240
GGTATTAGAA TCTTGCTGTA CCCAAGCAAG ACGTTAATT TTCTTTTAAC TGTTTTGGGG	300
AGGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATTCCAAC	360
AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG	420
CAT	423

## (2) INFORMATION FOR SEQ ID NO:1234:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTTA	60
TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA	120
ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACC GGAGAG CAGACTTCCC TCACGGCTGG	180

```

GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG      240
CACAAGCAGG TGTTCCTACC TTTTCCTAT GCCTGGACT AAGGTTGGC CAGTGTAATC      300
ATATAAGGCC ATCTGACAT TGTTCCTGTG TTCAAAATT TGGATTTTA TTTACATTAG      360
AACTACATTG CTCCTAGTAG AACATTACCT TTAGGGGACT AATTTTCCAT GGAGAACTAT      420
TTCAGCATAT TGCATGCTGC TCAGACCCA AGTCAGATAT GCCACAAGC TCGAG          475

```

## (2) INFORMATION FOR SEQ ID NO:1235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

```

GTTTGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTGAT CCTATTGGT      60
ATGTTTTTGT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT      120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAACTCT TTGTATGCCT      180
CATTGAATAT GCCAGGTAAG ATTTATGCAG TCAAGAAATG ATTATTTTTC TGAATAAAGT      240
GTGTAGCAGT AGTTCAAAAT TGTGCCCTTG TTTAACAGT TTCTGTCNAC ACCTTCTCGA      300
G                                     301

```

## (2) INFORMATION FOR SEQ ID NO:1236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

```

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTTACA AGTAAACAGT AAGTGCAATT      60
GTATTTTAAT TTCTTGGTCT CCGAAACTC AGCTGTGACT GCTTTCCATT AACAGTTCCA      120
GCTCTATGTG TTTCCTCTAA CGCTAAAGGC ACAGCCCCCG GGAATCTACT GCTTCCTAAG      180
AGTCTCCATG GAGTCTATTT TACAACCTCC TTCCCTCCA TGCTTCCGCG GAGGAGTCTA      240
TACTATCTCT ATATACACAT TTAAACATT ATTCTTCATT TGAAATTCCT TCAATAAAAA      300
CACAGTCACC ATTCTTCATC TTCTTGGGAA ATGGCCTGCT CTCGAG          346

```

## (2) INFORMATION FOR SEQ ID NO:1237:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

```

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCTGGGCT      60
CAAGCGATTG TCCTGCCTTG GCCCCCAAAG TGCTGGGATT ACAGGTGTGA GTCATGGCAG      120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCTGG GGGCGGTCCT      180

```

ATGAGCCCCT	CACAATTGGA	CACAGTTTTG	CAAAGGGGTA	AAAGGACAAG	AATCGGTAGC	240
TGTGACTGTG	GATGAGCCTC	TGAGCTTCAC	TTTCCCTCCC	TGAAAGGGGG	TGACAGTGGC	300
ACCTCCCTGG	AGGTTTTCGT	GGAGGGGAGG	AAACACATGT	AAAATACTTC	ACCCC	355

## (2) INFORMATION FOR SEQ ID NO:1238:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGGCC	AAAGAGGCCT	ACTAGACCTG	ATCACCACGT	TCAAAAGTTG	GCTTTCTCCA	60
TTTTAAGTTC	TTCCTTAAAG	CCTCTTTAAG	CAAAGTCCCT	GAAATGATAC	AGTAGAAAAA	120
TCACACAGAC	TTATTAAAAA	TGAATTCAT	CACTATTCCT	GAGATCTCGC	CTGCCCCACT	180
GAGGACATTT	TGTTTTCGCA	AAGTGCTTTG	AAATGTGATA	AAGGATCTTA	AAGAATATTT	240
GTAATAATTAT	GCCCAAAGAA	GACATTCTTT	GAGGTAACT	TGCAGTGTCT	AAAAGTCAAG	300
AATGAGGAAG	GAAAGGAAAA	TAACAGATTC	ACTTTAAAAT	GGACCACGCT	AATTGGGCAG	360
TGAAACATCC	TTGTGTCACA	CCATTTACCG	TAGCAGACCA	GAAGAGGGAA	AAGGCTTGAT	420
TTTTCTCTCA	TAGATACCAC	AGTTCACCT	CAAAAACATT	CCTAAAATGG	ATTGATATTT	480
CTCTGATAGA	GCACCTGTTT	TGCTACTGAC	AGTGTTAAGT	TCCATACTAA	TCAGCTCATC	540
TAGCCTAACG	ACAACCTCGAG					560

## (2) INFORMATION FOR SEQ ID NO:1239:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC	AAAGAGGCCT	AAGGAGAANG	AGGCTCAGAA	GGAGACGATT	AAGGATCTTC	60
CCAAGATGAA	CCAGGAGCAG	TTCATTGAGC	TGTGCAAGAC	GCTTTACAAC	ATGTTTCAGTG	120
ANGACCCCAT	GGAGCAGGAC	CTGTACCACG	CCATCGCCAC	CGTGGCCAGC	CTCCTGCTCC	180
GCATCGGAGA	GGTGGGGAAG	AAGTTCTCAG	CCGCACAGG	CAGGAAGCCC	AGGGACTGTG	240
CCACTGAGGA	GGACGAGCCA	CCAGCACCCG	AACTGCATCA	GGACGCAGCC	AGGGAGCTTC	300
AGCCCCCAGC	TGCAGGAGAC	CCCCAAGCCA	AAGCAGGCGG	AGACACACAC	CTCGGAACAG	360
CCCCACAGGA	GAGCCAGGTG	GTGGTGGAGG	GGGGCAGCGG	CGAGGGACAG	GGCTCACCCCT	420
CCCAGCTGCT	GTCTGACGAT	GAAACCAAAG	ACGACATGTC	CATGTCCTCC	TACTCGGTGG	480
TCAGCACGGG	CTCCCTGCAA	TGTGAAGACC	TTGCAGACGA	CACGGTGCTG	GTGGGCGGGG	540
AGGCCTGCAG	CCCCACAGCG	CGACTCGAG				569

## (2) INFORMATION FOR SEQ ID NO:1240:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GAATTCGGCC	AAAGAGGCCT	AGAGACCAGC	CTGGCCAATA	CGGTGAAACC	CTGTCGCTAC	60
TAAAAATACA	AAAATTAGCC	AGGCATGGTG	GCTCACACCT	GCAGTCCTAG	CTACTTGGGA	120
GGGTGAGGCA	GGAGAATCAC	TGAAGCTTGG	GAGGCAGAGG	TTGCAGTGAG	CCAAGATTCC	180
ACCGCTTCCC	TCCAGCCTGG	ATGACAGAGT	GAGACTCCGT	CTCAAAAAAA	CAAAAAAA	240
GTTACTTCAA	TAATGTACTT	TTTTTTTCA	AATTACAGAT	AATCTATAAG	GAATTAATCT	300
TGAAATTAAT	TCCAGGTTTA	ATTGTTAATG	AAATTTTACA	AGCCTAATTT	AACACTTGTC	360
TGGATAACTC	ATTTTGATAC	TGAGTAAATA	GTCACCGGTC	TCGAG		405

## (2) INFORMATION FOR SEQ ID NO:1241:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC	AAAGAGGCCT	AGGGCTTTTG	TGAATAAATT	TTAAAAGAGA	CTACTGCCTG	60
TCCTTAAATT	CCTTTTCTT	TTTATAAAAA	AAGAACTATT	AAAAATGATT	GACAAATTTT	120
GAGTTAAAAA	ATTGTTAAAA	CATTCTCTAT	ATTTAATTTT	AATTTTATAA	TAGATTACAG	180
GAAGATGCTT	ATGAAACAAA	TACATTTGTT	TCAGTACATG	TCTTTAAATG	ATAGACTTAT	240
AAGTATGTAA	ACAACATATAT	AATAAAAGGT	TTCCAAACGC	TGCCTGTAAG	AAATCAGGCA	300
AATTTTACCA	TAAGCAATAA	ACCATTCCAA	GCCTTCCAGA	CAGTCTCCAT	AGCCGCACCA	360
GCATGGCAAT	AAGCTTTAAC	CAAACGAAAA	CAAACAAACA	AAAGCACTTC	GCAATTGTT	420
GCTGCAAAAC	AGGGAGAGAA	AAGAGTGATC	AACTTGATG	GAATCACAAC	AGTCAATATA	480
ATTTAAGGGA	CAATAAAGTC	AATAAGGTTG	ATGGTGTTTA	TTGTTTAAAA	AGTTAGGCCT	540
CT						542

## (2) INFORMATION FOR SEQ ID NO:1242:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC	AAAGAGGCCT	ACTGATACAA	TTGTTGACTT	TTCTTTTACT	ATGTGTAAGA	60
AATACCCCAA	ACATGAAAAG	ATTGTTTGA	TCATATGCAT	GTATGTAGAA	TATTTTGTGA	120
GAGCAGAAAG	ATTATGTTAG	AAGTGTGATT	TTTATTTTCA	GAAGTCATAT	ACATGTAAGC	180
TACAATTTTG	AGTGCTTTAT	AAACACTTAA	GATATATATA	TAAATTTTAA	TTTCATAGCA	240
ACTTGTAATA	AATAAAATAC	TTGTTGAAAA	GCCTTTTCA	ACATATCCCT	AAGCTAAGGG	300
AAGAGGAAGG	AATAACAAC	CAGTGAAAAG	ATGGTCTCCA	GTTTCTGAAT	GAAAAAGCTA	360
CAACCTCGAG						370

## (2) INFORMATION FOR SEQ ID NO:1243:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCCAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGGTACC	ATTGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAAA	AAAAAACACA	TCTGCCCCGA	ACACTTTCCC	ACTGTTATTC	TTTCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 468 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTC	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTGAGGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCCTGA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 444 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTCAGACGCC	CTTGCAATGT	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTC	TGGTGGCGTC	TTAACAATTT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGG	ACATTTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAACT	TTCTTGCACT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```
GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA      60
CGTTCTCTAA TTCCTCTTGA ATCTGTTTAA TTTTCTCCC TTGGGAATTG TTAAGTGATAC     120
ATGTATTGTG ATAAGTCTA TAATTTTGCT TTTATTGATT TTTTGTGCTT TATATCTGCT      180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTGTC TGGGGGATCT      240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG      300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTTCCCA AGACAGCTGG TTGTTTAAAA      360
GAGCCTAGTG CCACTTCTCT CTTGCTTCCT TTCTTCCGT GTGATCTCTG CACATGCCAG      420
CTCCCCTCGA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTTTTTTT TTTTTTTTTT TCNGGGTGTA      60
GAACATTAT TATTTTTC CACAAATCAC TGAAAGTTA GGTCAGTGGG AAATAATTTT      120
AATCAAATAA TTGTACATAT TCTTCCACA TATCTGCCT TGTATTAGGA AATGACATTG      180
TGATCCATT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAATA TTAATAATAA      240
CTCAACACA AAAGGCAAGA TGAAATAAAC TGTTTTTTT TCTCCAGAAA TCTCTACTCC      300
AGTGCCACA GCACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCCC GATCACAAAT      360
TTCAAAGAA CTAGGCCTCT TTGGCCGAA                                     389
```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```
GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT      60
TAGAATTGGA ATTACTTCT TACTAGTGTC TTTTGGCTTA AATTTGTCT TTTGAAGTTG      120
AATGCTTAAT CCCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTGA      180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCCTGCCCC TGTCTTTTCC      240
CCTTGGTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTTGTAA      300
ATATTGTACA AATTTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTTGCATTAA      360
CTTAGGCCTC TTTGGCCGAA                                     380
```

(2) INFORMATION FOR SEQ ID NO:1249:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 386 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```
GAATTCGGCC AAAGAGGCCT GTTGGTTTG TGA TAGACT TAAAAACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTGCACA CAAGATTGTA AAAAGTACT TCAAGTTTGA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAACTAATC ATATAAGATA CTGTTTTTCT TTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTTCCTT TATCTTCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCCT CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1250:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 428 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```
GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAA CAAGATACCT GCCACGCAA AGAGTTGAAG GTTGCTAATA      180
ATTTACTG GAATCTGGCA TTTTCCAAG CCAAGAGAAG ATCGAATGGC TTTTGCAGC      240
TAATACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTGGTCA GTTGTGCTAT TCATTATTAA AACTAAAAAC TTTGGCGGTT TAGGCCTCTT      420
TGGCCGAA
```

(2) INFORMATION FOR SEQ ID NO:1251:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTCTAC ATATTAACTA      60
CAATTATGG TAATTGTGA AATGTTTTTC CATTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACAGTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTGGC CGAA
```

(2) INFORMATION FOR SEQ ID NO:1252:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC AAAGAGGCCT ACTTTTTTTT TAATTTTCCA CTTTCTTCTT AACTTTACTT      60
CTCTTTTGTG CCCCCCCCAT CTTACAGAAG TTGAGGCCAA GGGAGAATGG TAGGCACAGA      120
AGAAACATGG CAAACTGCTC TGTGCTTTCA AACCAAAGTG TTCCCCCAA CCCCAAATTT      180
GTCTAAGCAC TGGCCAGTCT GTTGTGGGCA TTGTTTCTTA CAACCAAATC TGGGTTTTTT      240
TCTTCTTTCT TTAAACATAG AGGTACCACC ACAAGGGATG CCCTACTCTC TCGCAGCTCT      300
TGAAAGCATC TGTTTGAGGG AAAGGTCTCT GGGCAAGCAA GTGTTATTT GGATTGCTTG      360
CTTCCCTTTT TCCACCTGGG ACATTGCAAT CATAAAATAA CAGTAAATTC CAAACCTCTA      420
GGCCTCTTTG GCCGAA                                     436

```

## (2) INFORMATION FOR SEQ ID NO:1253:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GAATTCGGCC AAAGAGGCCT AGGGTAGATC ACTTGATATC AGGAGTCGAG GCGGGAAGAT      60
CACTTGACGT CAGGAGTTCT AGACTGGCCC GGCCAACATG GTGAAACCGC ATCTCCACTA      120
AAAATACAAA AATTAGCCTG GTGTGGTGGT GGCACCTGT AATCCCAGTG ACTTGGGAGG      180
CTAAGGCAGG AGAATTTCTT GAACCCAGGA GGCAGAGGTT GCAGTGACCA GCAAGGTTGC      240
GCCATTGCAC CCCAGCCTGG GCGATAAGAG TGAAAACCTC ATCTCAAAAA AAAAAAAAAA      300
AAATTCCTTT GGAAGGCCTT TCTACATAAA AATCTTCAAC ATGAGACTGG AAAAAAGGGT      360
ATGGGATCAT CACCGGACCT TTGGCTTTTA CAGCTCGAG                                     399

```

## (2) INFORMATION FOR SEQ ID NO:1254:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```

GAATTCGGCC AAAGAGGCCT ACCCGGTACT TACTTCTCAA TCCTAAAGAG AGAAAACAGG      60
TGTTTGATCA GTATGTAAAG ACCAGGGCAG AGGAAGAACG CAGGGAAAAG AAAAATAAAA      120
ATGCAAGCCA AGGAAGATTT CAAAAAATG ATGGAAGAAG CAAAATTAA TCCAAGAGCA      180
ACTTTTAGTG AATTTCAGC CAAGCATGCT AAAGATTCAA GATTCAAAGC AATTGAAAAG      240
ATGAAAGACC GAGAAGCCTT GTTTAATGAG TTTGTGGCCG CTGCTAGGAA GAAAGAGAAA      300
GAAGATTCTG AGACCAGAGG TGAGAAGGTA AGATGGTTT AGTTCCAGTG GTGTGATTGA      360
TGGGAGTGTG AATGGGAAAG GTCTATGCTG GTGTTATGTT TCTAACCTTA TTCATTGGCA      420
TAAATAATAG GACGTACACT CGAG                                     444

```

## (2) INFORMATION FOR SEQ ID NO:1255:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC	TTCATGGCCT	AAGAAGGACT	ACCCTGCACT	GCTTTCCTTG	GATGAGAATG	60
AACTCGAAGA	GCAGTTTGTG	AAAGGACACG	GTCCAGGGGG	CCAGGCAACC	AACAAAACCA	120
GCAACTGCGT	GGTGNTGAAG	CACATCCCCT	CAGGCATCGT	TGTAAAGTGC	CATCAGACAA	180
GATCAGTTGA	TCAGAACAGA	AAGCTAGCTC	GGAAAATCCT	ACAAGAGAAA	GTAGATGTTT	240
TCTACAATGG	TGAAAACAGT	CCTGTTTACA	AAGACAAACT	CGAG		284

## (2) INFORMATION FOR SEQ ID NO:1256:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC	TTCATGGCCT	AGTGGGAGTT	TGCTAATGTG	AAACCTAATG	ATGTCTGAAA	60
ATGGTCCTGA	TGGGTATTAA	TAGCCATCTG	GAAAAATTTT	ACATCTTCAC	AAATAATCCC	120
AATAATTTAT	ATTGTGAAGA	TATTATCCTG	ATAGTCCTTC	TTTTCCTATA	TTCTTGTCGG	180
CTGTAGGATG	AGAGCAGTAT	GAAGCAAACA	GAAGACATTT	TGAAATTAAT	CACAAAATTC	240
CCATGCTTT	GAAGCCTGCT	ATTATTATAC	TAAGCCTTCT	TATAGCTTTA	AAAATCAAAC	300
AATGCCAAAC	AGTATATCTA	ACATTTTAA	TTTCCTTTGA	GCCAAACCAA	TTTGGTTTAA	360
ATTTCTCTGC	CTCCGTGAAG	ACAAGCTGGG	CTGGGGAGGA	CGGTGTCTAG	GAGGGATGAC	420
CCCACTCAGC	TCCAGGCAGT	GTTCTGCCGA	GACCCCAAGA	ACTCGGGGTG	TCAGAGGGCA	480
AAGGAACACT	CTGCCTTTCA	CGGCTGCTGA	CTTCTCAGGG	CTGCAAGCAG	CACAGAATGT	540
TATCCTTACG	TCCTGAGCCG	GTTTAAGTCT	GTGGAAAAGG	AAGCACGGGA	GAAATCCACG	600
TAACCTTTGC	TTTCTTTTAA	AGGGAAGCGG	TTCCGCCGTG	AACCTGGAAC	CCTCAGCTCC	660
GGGTGTTCTC	GGCAGAAGGG	CAGCTCTCGA	G			691

## (2) INFORMATION FOR SEQ ID NO:1257:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGGCCT	AAGCTGATCC	ACGATCAGAG	TGCTCCCAGC	TGCCCCAGCA	60
GCTCCCCGTC	CCCAGGGGAG	GAGCCTGAGG	GGGAAGGGGA	GACAGATCCG	GAGAAGGTGC	120
ATCTCACCTG	GACCAAGGAC	AAGTCGGTGG	CAGAGAAGAA	TAAGGGCCCC	AGTCCTGTCT	180
CCTCTGAGGG	CATCAAGGAC	TTCTTCAGCA	TGAAGCCGGA	GTGGGAGAAC	TTGAACCACT	240

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTTCATCGTG AAGAAATCCC 300  
 GGGACGCCAA GCTTGTTTGT CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360  
 AAAACTACAT GGAGTTTCTC GAG 383

## (2) INFORMATION FOR SEQ ID NO:1258:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGAATACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG 60  
 CATTGCCTCC TCCCTCCCGG TGAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120  
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180  
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240  
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCATATG GACGACGATG ATGACGATGA 300  
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360  
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

## (2) INFORMATION FOR SEQ ID NO:1259:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 189 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGAGGC AGGTTCTTGC 60  
 TCTGTACCCC AGGCTGGACT GCAACAGCAT GATCTTGGCT CACCTCCGCC TCCCAGGCTC 120  
 TGGCAATCCT CCCACCTCAG CCTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180  
 CCACTCGAG 189

## (2) INFORMATION FOR SEQ ID NO:1260:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 278 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTTCTT AAGTTTTCTT 60  
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAAATA AAAATCTAGG TGCAAATTTG 120  
 TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTGTGTTTC 180  
 TGGGACAAGG TCTTGTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240  
 CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

## (2) INFORMATION FOR SEQ ID NO:1261:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC	TTCATGGCCT	ACTCACTGGA	TGCTGGGGGA	GGGCCCCCTCA	GGTGAGCAGC	60
CCACCACTGA	CTTCAGCGTT	GCTGGCTCGG	TTATCAGACT	CTCATCCAAC	ACAAGCTCAC	120
AGGGAAAGCC	GTTCTTGCT	CCTTGTGGAG	GGAGCTACCG	TCATTGCCCT	GAGACCACCA	180
GCCAAGAAAG	TAGGTATGTC	CAGGTAGGGA	ATTCAGAGGG	ACCCAGTGCA	TCCAATTATA	240
CAATTATACC	CAGAAAGTCC	TCGAG				265

## (2) INFORMATION FOR SEQ ID NO:1262:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GGTCAGTATT	GAAGGTTGTT	TTCTGAGCCA	TTGTATGAAG	CTGCTGTTTT	GGCGTCCCTA	60
ATGCAGGGTG	AGATGGTAGT	GTGATTCTTG	TTGTGACATC	TCGTGACTGG	GCAGGACGCT	120
GAATACTGAT	TGCTGCAGAT	GGAGGATGCT	GGATAGACAA	GGTTGGCCTA	CTAAGTGCTG	180
AATCAGTAGC	ATGCGCCGCT	GTCGTAGTGA	TGACTGGAGA	CTGAGCTCTG	GTGGCTGAGA	240
CAGTTGCTAC	CACAGCAGGA	GGGATGGCAT	TGGAGGTGGT	CACAGGTGGC	CGAGACTGGA	300
TTGGTTGGTG	AATGATGTGC	TGTACTGCTG	GCTGAGCAGT	AGCAGCATT	GGCAGCTGTG	360
AGGTCGGCCT	CAGGACTGTG	GTTACTTTAG	AACTGGACAT	CACAGCAGCA	GCAGCTGCAC	420
CTCGAG						426

## (2) INFORMATION FOR SEQ ID NO:1263:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 398 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	TTCATGGCCT	AGGCCGGTGT	TTATGCACGA	TGGCGTTGAA	AGCTAGTCCA	60
TCTCTCCAGC	TGGTGGTGAA	GTTGTGTACA	TTGACGTTGG	GATAACCTGC	AGTCTTCATC	120
TGGCACCACA	GAAGCAGGGC	ATCCTTGGCT	GACTTCTTCT	CCTTGTGTGC	TTCTGTCTCC	180
ACACTGATGT	CTTGATCTG	GAATCGAAGG	ATGATGGTCC	AGACCAGCCC	AAGGGTCAGT	240
CGGTGGTTTC	CGTCCACAAT	GTCAATGGAG	CCCATGTTTT	CCAAGTGCAC	TTTCTGCTCC	300
TTGAGGAACT	GCAGTGCTT	GTCCACGTTT	TCCAGGCAGT	GGATCCGCAT	GCGGCCCTTT	360
GTAGGCTTTG	GCAGTATCTC	TCCCAGAGAG	ACCTCGAG			398



## (2) INFORMATION FOR SEQ ID NO:1264:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTAA AAATTGCCC      60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA      120
TGATCTTCCT CTTTGAAAAT CTGTCCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTTT      180
CTGTGTTTTA GGGAAAGAAG CTCAGAAAGG ACCCTGCTC TTTGATGACC TCCCTCCGGC      240
CAGCAGTAAC CTCGAG                                         256

```

## (2) INFORMATION FOR SEQ ID NO:1265:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC      60
ATTTTGGCTA CAGTCCTACC TAGATTTTTT TTTTITAGAT GGAGTCTTGC TCTGTCGCCC      120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTTCAAGC      180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCACGCCTGG      240
CAGCTCGAG                                         249

```

## (2) INFORMATION FOR SEQ ID NO:1266:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA      60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC      120
ATGGTGCAGT CTCTCAAGGA GTTTACGCTC TAGTGGAGAA AACAATCAGA CAGCCTTAAA      180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG      240
TCCTCTCCAT CCTCCCTTC TCGAG                                         265

```

## (2) INFORMATION FOR SEQ ID NO:1267:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC	TTCATGGCCT	ACTAGACCTG	CCTCGAGATT	AGGGGGGTTA	GACTCAGAAT	60
TCTGTCCAAA	CTCCTGGACG	ACCTCTTGAA	ATTAAGTCAG	GGATTTTATG	TACTGGGTGA	120
ATTTTCGTAAC	CTCTGGGTAT	AATATTAGGT	TTGCATGTAG	AAAGGGTCTC	CAGTATAGGA	180
CTTCAAAGAA	ACTAAGCCAT	AGACGTAATT	TAAGGGCTGT	TCTGATCTGA	AGAAGTGCCA	240
TGGGTAGAAG	TTTtagccat	GGTAAAGAGG	CTTCTGGCA	TCATTTGCTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC	TCATGGCCTA	CTGGTCCAAG	CTGATTACCC	TCATAGTGTC	CATCATTGAG	60
GAAGACAAGA	ATTCTTACAC	TCCCTGCCTC	AACCAGTTTC	CCCAGGAGCT	GAATGTGGGT	120
AAAATCAGCG	CTGAAGTGAT	GTGGAATCTG	TTTGCCCAAG	ACATGAAGTA	CGCCATGGAG	180
GAGCAGGACA	AGCATCGTCT	ATGCAAGAGT	GCCGACTACA	TGAACCTCCA	CTTCAAGGTG	240
AAATGGCTCT	ACAATGAGTA	TGTGACGGAA	CTTCCCGCCT	TCAAGGACCG	CGTGCCTGAG	300
TACCCTGCAT	GGTTTGAACC	CTTCGTCATC	CAGTGGCTGG	ATGAGAATGA	GGAGGTGTCC	360
CGGGATTTC	TGCACGGTGC	CCTGGAGCGA	GACAAGAAGG	ATGGGTTCCA	GCAGACCTCA	420
GAGCATGCCC	TATTCTCCTG	CTCCGTGGTG	GATGTCTTCT	CCCAACTCAA	CCAGAGCTTT	480
GAAATCATCA	AGAAACTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC	TTCATGGCCT	AGGCCCTGTC	TCCACCTGGG	GGGACTGGGA	GTGTGAGTGT	60
GCATGGCATG	TGTGTGGCAC	AGATGGCTGG	GACGGGTGAC	AGTGTGAGTG	CATGTGTGCA	120
TGCATGTGTG	TATGTGTGTG	TGTGTGTGGC	ATGCGCTGAC	AAATGTGTCC	TTGATCCACA	180
CTGCTCCTGG	CAGAGTGAGT	AACCCAAAGG	CCCCTTCGGC	CTCCTTGTAG	CTGTTTTCTT	240
TCCTTTTGTG	GTTGGTTTTA	AAATACATTC	ACACACAAAT	ACAAATTGAC	AGGTCAAAAT	300
CCATGAAATG	AGATCCCCCA	GCGGCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA TACTGATTCA CTTTGGCAAT TTTTCAGATA    60
CTACTTGATG TGACACCTCC CCTAGGCTTG CTGTGGGTCT CTTGGAAGAT AGAGCTATAT    120
TAACTCCTTG ACTTAAAGGG CAGCAGACTA TATAAGGTCT CTTTACAGAC AGAGTAGGGA    180
GAATAATGAA AAACTTTTTG ATTTCTAGAG AGAAGAGAGA AGACATAGCA ATGGAACGTG    240
TCTTAGCTTT GTTTGCTACA ACTCTTCAA GTTTAATTTT AGATTCAAGT CATTATATCA    300
TAGAGCATGA AACATATAAT CATGCCTTTT ACTAATTGCG GATACTTAAA ATTATATATT    360
TTTGACCTAC TGTGTTATGG TCAATTGAA AAAGAATGGT TTGATTATAT ATTATTGTCT    420
GTAGATTCCC TGTACTATTC TAGGATCATA TGACATATTA TCATTACTAA ATATAGCACT    480
AATTATTGAT GCTCCGCTCG AG                                         502
```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 285 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```
GAATTCGGCC TTCATGGCCT ACCCCTGACT ATTCAGTAGG AGAAGAAATC AAAAATCCAT    60
TCTTTTCTCC TTCTCTCCCT CCAACAGTGG CCAGGGGAAG GGAAGTGAG GGCAGGGGCA    120
AAAAGATTG GGAATTTTTA TTTATTTATT TATTGTGACT TTTCATTTTT TTGGTATTTG    180
GCTTTACTGG AATAGGAGGG CCCGTGCCCA CTGTGCCCGG TTTATCCCTT ATTCGCCAAA    240
CCCTGCTCTC CCCAACACCT ACTCACTTAA GCACTTGTC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 405 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCTAGA CCTGCCTCCA ATTTGAAGAT TTATTTCTCT CTTTGGATAT AGAACAAAAT    60
AACTTTATGT ACATTTTATT TCACTTTATT TTACTATTGG GTTGGTGCAA AACAAATTGC    120
AGTTTTCCCA TGAAAAGTAA TGGCAAAAAC TGCAATTACT TTCGCACCAG CCCAATATTT    180
TATTTTGAGA CAGAGTCGCA CTCTGTCACC AAGGCTGGAG TGCAGTGGTG TCATCCCAAC    240
TCACTACAGC CTCTGCCTCC TGGGTTGGAG AGATTCTTGT GCGTCAGCTT CATGTGTAAC    300
TGGAATTACA GGTGCACGCC ACCACGCCCA GCTAATTTT GTATTTTTTG TAGAGATGGG    360
GTTTCGCCAT GTTGCCTTGG CTGTTCTCAA ACTCCTGACC TCGAG                                         405
```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

GCGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT	60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA	120
GTTTTGCTCT TCTTGCCAG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG	180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG	240
TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT	300
ATTAGAAGGG GCATGGGGAA TGTGGGGTCA AGGTTATAGT TTTAAATAGG GTGGTCAGGG	360
AAAGCTTTCT GAGAAGGTGA CATTGTAAAC AAATACTTGA AGGAGTCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 285 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA	60
AAACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTTCGTTG	120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTTG TGGTGGCATT GGAGTGAAGA	180
GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTTGGA	240
GAATGATGTA GTAGGGAAAG AGGAAAAGGG TGTAGGCATC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 280 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT	60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC	120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CCTTCTCTCT	180
TTTCTCTCTT TCCATCCCTC CCTTCCTTCC TCCCTCCCTT CCTTCCTCCC TCCCTTCTCT	240
CCTCCCTCCC TCCTTTCTCT CCTCCCCCA CCCACTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTT TTCTTAGCTT ATCAGCTATG	60
GTTAGTGTTA GCGTATTTTA TGTGCGGCCC AAGACAATTC TTCCTCTTCC AGTGTGGCCC	120
AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCCAC	180
AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG	220

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCACTCCAG CCTAGGCAAT	60
AGAGTAAGAC TCCATTTCAA AAAAAAAAAA AAATGTTGAT CAAAAGAAGC CAGATGACAG	120
AGTACTCACT GTGTGAGTCC ATTTATTTGA AATTCTAGAA CAAAAAATAA ATATCCATTG	180
ATAGAAATGG GAACAGTGTT GGCCTATGAA GAATGGAAT TGACTGGAAG GAGGCCTCTG	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC	60
GGGAGGCTGA GGCAGGAGAA TGGCGTGAAC CCGGGAGGCG GAGCTTGAGC TGAGCCAAGA	120
TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNAA AAAAAAAAAA	180
GAAAGAAAAA AAGAAAATAA ACAAAGAAAA AATTAAGATT TTTGAAATAA AAACAAATAT	240
TAAAAATTAT TGAAATATAT TGAAAGTTTT TTCACCATAT ATATTACCT TTTAAAAGGA	300
TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT	360
AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC	420
ATTAAATAGA GCATTCCAGT TTTCTAGGGC ACACTACTTG CTGTATTTCC AAGGTCAAGC	480
AAAATAGCTT TCGTTCGAG	499

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```

GAATTCGGCC TTCATGGCCT AATGAGCTAA AAGCAGTGTC ATCTCCGCAT GTTGGAGCAG      60
CCAAGAAATA GTTTGGTACT ACCGACATTG TCTAATCCAT GTCACATCCT CATACAATTT      120
AATTGCTCAA CCATGCATTT AAAACTCCTC AAGAAAGGAT TGGTACTGCA ACTGTAGGTA      180
AACTGAAAAA AAATAAGAAA GAAAGAGTTG GATGAAAAAT TGAAAGCCCA AGTTTAGATG      240
TGCATTAAGT ATTAAATAGC ACAGTATCTT CTTCATGGAG CCTTTTTCCT TCCCCATCC      300
CCTGCAGCTA CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1280:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```

GAATTCGGCC TTCATGGCCT ACTTCCTTTC ATTTTGAAGC AACAGTTTAT AAACAGGAAA      60
GTCTACTGGT TTCATAGAAT CTGTCAGATT TGCTTATTTC CTAAGGTTT CACGCGCGTG      120
GACTATATTC CAGTGTCTTCT AGTCAAAGAC CTTTATCCTC AAATCATGAG ATTAGAGTAA      180
AACAACTGCT GTAAGGTTGA GCATTTCATG ACCAATGACT ATGAAGGCAC ATTCACCAAA      240
CACAGGCACT TTAAGGGCAT CCTTGATTAA TTGCTAATT GCTATTTTTT GTTGGTATGT      300
GAATTCCTGC TAGGAGGCCG AGGCTAGTAG GCAATGAAAA AGACAGAACA ATGGTAAAAT      360
GCAGCCCCCG TCCTCTACAA ATTGACAGTA TAATTTAGGG GCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1281:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```

GAATTCGGCC TTCATGGCCT AAGATTGACA AAGAAATAGA GCTTCACAGA ATTCTTCATC      60
ATAAGCATGT AGTGCACTT TACCACTACT TCGAGGACAA AGAAAACATT TACATTCTCT      120
TGGAATACTG CAGTAGAAGG TCAATGGCTC ATATTTTGAA AGCAAGAAAG GTGTTGACAG      180
AGCCAGAAGT TCGATACTAC CTCAGGCAGA TTGTGTCTGG ACTGAAATAC CTTCATGAAC      240
AAGAAATCTT GCACAGAGAT CTCAACTAG GGAACCTCGA G

```

## (2) INFORMATION FOR SEQ ID NO:1282:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

GAATTCGGCC TTCATGGCCT AGTAGTTTAT TATATAGAAA TTATTTGTCC TTGTCTTAGT	60
TGTGCCCTTT GACTCAGCAA TTCCCCTTCT ATAAAATTTT CCCAAGCAGA TGATTATGGA	120
TATATGCACC AATTTGGAAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC	180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA	240
AAATCTCGAG	250

## (2) INFORMATION FOR SEQ ID NO:1283:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAAGTTAT	60
TGACACTCAA CAGAAGGTGA AGCTCGCAGA CATACAGATT GAACAGCTAA ACAGAACGAA	120
AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA	180
TGAAGGTGTA GGAAGAATGT TTATTCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT	240
AGAGAAGCAG TCTCGAG	257

## (2) INFORMATION FOR SEQ ID NO:1284:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC	60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG	120
GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAAGCCACT	180
CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA	240
TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCCTAATA	300
GCTACAAAAC TGTAAAGTTT ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA	360
TAACATTAAT AGTGTAGAAT ATTTAGATGT AATTTGCATA TGCAAATGTG ATTTACCTGA	420
GCCAAAAACT CGAG	434

## (2) INFORMATION FOR SEQ ID NO:1285:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

AGCAATATTT ATTTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC	60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA	120

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT	180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACTTCCTG CGCTCGCACT	240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACTCG	300
AG	302

## (2) INFORMATION FOR SEQ ID NO:1286:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

GAATTCGGCC TTCATGGCCT AATCTTTTCT AATTGTCTT AATGCTTTAT AATTTTCTAT	60
GCAGAGGTCT TGTAGATCTC TTTC AAGAT ATTGATGTT TGTTTGTTG TTGTTTGTT	120
TGTTTTTTGA GACGGAGTCT CACTCTGTTG CCCAGGCTGG AGTGCAGTGG CGTGATCTTG	180
GCTCACTGCA ACCTCCGCCT CCTGGGTTCA AGCAATTCTC CTGCCTCAGC CTCCCAAGTC	240
TCGAG	245

## (2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

GAATTCGGCC TTCATGGCCT AATTTTTTTT CTCCTCTTTC TTCTAGTACA TATTGATAGG	60
TATAACATAA TTAAGGTTTA AAAAAAATTA GACATAGTTA TTCAGATTGA GGACCAGTAA	120
GGATAGAAGT TTCTCTTATT TATGAAAAA AATGCTAATA ATTTGGGGC AGTTTTTTCC	180
TTTAATTATT TTTTCAATT TCAAGTTTAA TTTTATTTA GCTGATCTCG AG	232

## (2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGCCT TCATGGCCTA AGAAGATCAC	60
TTGAATCTGA GAGGTAGAGG CTGCAGTGAG CGAAGATCAC ACCACTGGAC TCCAGCCTGG	120
GCAACAGAGT GAGACCCTGT CTCAAAAACA AAGAAGAGCA CTAGCTTCTC TATCAAGTAA	180
GTGTAGGGTT TTA AAAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACGAGTA	240
TGGAAGTTTC CCTTGAAGTT GGAAATTCAA TTTCCCCCTT ACCCCCCCAA CCCTCGAG	298

## (2) INFORMATION FOR SEQ ID NO:1289:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA      60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG      120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA      180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAACA GCTCGAG                      227
  
```

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 264 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```

GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTTGGTT TTGAGCTGGA      60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC      120
CAGAATCTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC      180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA      240
AAGCTTCTAA TGGGAATACT CGAG                      264
  
```

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```

GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA      60
CTTTGAATTT AAACATGCAT CTATTATTG TGTCTTTTGT TTTTGTCTTT GAGGCAAAGT      120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC      180
CCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC      240
CGCCACCAG CCCAGGTAAT TTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC      300
AGGCTGGTCT AGAATTCAAT CGG                      323
  
```

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 289 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCTCTTC	ACTCCGTCC	TTCTGCCTCC	CACCATATGC	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATTG	CCTCCTCTGG	ATTTTCCAC	ACTCTGGGG	AACTTCCTGT	240
GACTCCCTGC	CCTTCACCAC	CAGCCTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTCATGGCCT	AGTTGAAATC	TTAGGAATG	AACTTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAACTGA	TTAAGTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTTGTACC	TTGTGGTATA	TCTGTCCCTA	TTAAATAAGT	GTTGTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGGTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAACTAC	GTTAATTTA	CCTTACTTTC	ATTGTAAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACTACTTTT	GCAGTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTTGTTTTGT	GTAAAAGGGG	AAAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTCATGGCCT	ACAGGTGTAT	GTCAACATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCCT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAACCTCTG	GGCTCCATCT	TCCCGCTTCG	GCTTCCTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTAA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTCAG	AAGTTAGACT	GTTAAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTTTGTA	AAAGGAAGGA	GATTTCTGTC	360
TTAAATAGCT	TTAATAAAGT	TTCAGTTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```
GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATTT    60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTCTCACTT CTTTCTCTGG    120
TATCATTTTC ATTCTTCATC ATTGTTTTAG TGCCTTTACT TCAATTCCTT CATTATTTGA    180
ATTTTCTTT TTATCATCTT GTGATTCAGT TTTTATTAT TTTTGATAG TATTCTCCTT    240
TCTTCCATT CCACTCGAG                                         259
```

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```
GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATTA ACACCTGAAC TCTGGGCCAG    60
CTTAAGTGTA TATTCTGTAA AAAATTTGAA ATCCCCAAA TGTCACATGC TATGACAGTC    120
ACTTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT    180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTTAGCA ATAATTTTCT    240
CTGTGTGTGC GCTCGAG                                         259
```

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```
GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT    60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT    120
ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTT CCTCAGTTTG    180
GAACCTCTAG TCCACTTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC    240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT    300
GTAGATGACC TTTGGCCCGT TCTCGAG                                         327
```

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

```

GAATTCGGCC TTCATGGCCT ACACTCTCAT GTTTGTGCA GCATTATTCA CAATAGCCAA      60
GGTATGGAGT CAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC      120
AATGAAATGT GATTAGCCT TTAAAAAGAA GGAAATCCTG CCATTGGAA CAACATGGAT      180
GAACCTGGAG GGCATTGTGC TAAGTGAAAT AAACCAGACA CAGAAAGACA AACACTGCAT      240
GACCTCACTT ACTGTGGAAC CCCTCGAATT CTGGATCTCC CTCGAG                      286

```

## (2) INFORMATION FOR SEQ ID NO:1299:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

```

GAATTCGGCC TTCATGGCCT AATGAATTTA GTATTATTTC TATCATTTC ATTGCAAATT      60
GTCAGTATCC CCTGCTACGT TTCTACTAAT TTACCATCGC TTCTTCAAAA AATTGTGTTC      120
AGAGTGCTAC AATTTCAGAC TTTGAAATGA ATCACTATAA CTTTAAAAA TTAGAGATTT      180
TAAAAACTGG AGATTGAATA TATATAAAAA ATACAAAATT TGACATTAA AACCTCATTG      240
AACTTTTAA AAAGCCAGAC TCATATTAAG GCACACACC TCGAG                      285

```

## (2) INFORMATION FOR SEQ ID NO:1300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

```

GAATTCGGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGGA      60
TTCCTGAACC TGGGTAACAA CGAGACAAAC TCTAGCAATC TGAGCAAGGG AAGGGTCATC      120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA AACCAAGGCT TAGGGAGTTT      180
AGACCCTTTC ACATAAAGAA GCTTAATAAA AAGTGTGGG TGAAGAGATA AACACATGAA      240
GGGGTTGGCT AAAGTCAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG          292

```

## (2) INFORMATION FOR SEQ ID NO:1301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

```

GAATTCGGCC TTCATGGCCT ACTCCTCATT TGCCACCACC AGGCCAGTTT GTCCCTTTTC      60
AAACACAGCA ATCAGGATCG CCTCTGCAA GGATAGAAAA TGAAGTGGA CTCTTAGGAG      120
AACATCTTCC AGTAGGAGGT TTTACTTACC CTCCATCAGC CCACCCCCA ACATTACCTC      180
CATCAGCTCC CTTGCAGTTC TTAACACATG ATCCTTTGCA TCAGGAGGTG TCCTTTGGAG      240
TACCTTATCC TCCATTTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCCAGCAG      300

```

CCAATACCAC	CTCCCCCTTA	TCATCCCAGC	TTACTGCCAT	ATGTGTTATC	AATGCTTCCA	360
GTGCCACCTG	CAGTGGGCCC	AACTTTCAGC	TTTGAATTAG	ATGTAGAAGA	TGGAGAACTA	420
GAAAATTACG	AGGCCCTGTT	AAACCTGGCA	GAGCGACTGG	GAGAGGCCAA	GCCTCGTGGA	480
CTGACTAAAG	CAGATATTGA	ACAACTTCCT	TCTATCGGT	TCAATCCTAA	CAACCACCAA	540
TCCTCGAG						548

## (2) INFORMATION FOR SEQ ID NO:1302:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGGCC	TTCATGGCCT	AGTATCTATC	TAGTGCCTGT	TTGTGCGTTT	TTTTCTTTCT	60
TCCGCTGCTT	CCCCATTTTC	CTTCTGTCCT	TTTTCTCCTG	CTCCTTGTTT	TCCCAGCAGC	120
ACATGGGGTT	CCTCGGAGGA	GCAGAGGTGG	CCGCCGTGGG	GGGGCGTTTG	GGCTGCGGTG	180
CTGCGTCATT	TTTCCTTTGC	TTTCTCTTTA	CTTTAGACAC	TGGCCCAACT	CCAGGCGTTT	240
CCTTTTATTG	CCTCAGTGCT	TCTCTTCTGA	CCTGCATGTT	GAGTTCTGTA	TTGCTGGGGC	300
TTCCAACAAA	AACCAGAGTC	ACTGACAGAG	GGAACAGCAG	AGACCTTGTT	GGTATTCAGC	360
TGTGATGGAT	ATAGCGATCT	CGAG				384

## (2) INFORMATION FOR SEQ ID NO:1303:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC	AAAGAGGCCT	AGGGTACGTG	AATCTATTTT	TTCAGCTGGA	AATTTTATGA	60
AATCTGGTGT	GTATTTTATA	CTTATAGCAT	ATCTCGAGGC	AGGTCTAAAT	TCAATTCTAG	120
ACCTGCCTCA	AGAGCTCGAG					140

## (2) INFORMATION FOR SEQ ID NO:1304:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GAATTCGGCC	AAAGAGGCCT	AAATAAGTTT	ACTTTTATTT	TTGGTAACAC	TTTACTGCAT	60
TGTCTGAATA	TTGACAATCA	GTATGCATTA	TGAAGCTACC	TGGCTAACAT	TGTGTACTCA	120
CTGTGTGTGC	CAGGCCCTGG	GTTCAATGCT	CTACATGCAC	TTATATTTCA	TTTAATTCTC	180
TCTGCAACCT	GAGATGGTAT	AGCCACCTCA	TTTACAGAG	TTGAAACTGA	GGCTCAGAGA	240
CTGAAAGTTA	AGCCTGAGGT	TGCAGTCAAT	AAGAGGCAGA	GCTGGAACCTG	AAACCTACCT	300

GTGTCTGACC	ACCAGTTCGT	GTTCTGACGG	CAGGCTAGTC	TGCATCACAG	AGTGTGGAGT	360
AGATGGTGCA	TGCCTGCTAG	GATGGGCTAG	GTATCACTGT	AGGTAAGAAA	CAGCCCCAAA	420
CTATGGAAAT	GTACACCACC	GAAGGCTCTT	TTCCTGCCCA	TGCTGCACAT	CCTCCATGGC	480
TCTCCTGTGC	CCTGTGCCCC	ACATGCCCTC	ATCCTGCCAC	GAGAATAAAG	GAGCAGCCTC	540
CATATGGGAG	CTGTCAGCTG	CTCTAAGAGA	TGAAGGAGAG	AGTGGCCCGT	CTCAATGGCT	600
CCCAACTCTT	CTGCCTCGAG					620

## (2) INFORMATION FOR SEQ ID NO:1305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGCT	CAATGTTTTC	CAAACCTATT	TGACCCCCAAA	60
ACCTTTTTC	TATACCCAAT	AATAAGCTAC	AGAAGCTAATA	TTCTGCAAAAT	GTCTCTTGGA	120
ACACACTGCC	TTAAACAGAT	ATTTCTATAG	CTGTCAGTAT	AGTTATGTTG	CTCCCAAGCC	180
TAGTTATCTC	CAGTTGTTTT	AAGGGTGTTA	TGAAAAATTC	TTAAAAATATA	TATGAATTTG	240
TGTAACACAC	ACAGAGACAC	ACACACATAC	TACTTTAAGG	GGGTGAGGAT	CATTAATTCA	300
GATAATTTTT	AAGTTTCCTA	GTGATTCTCA	ATCTCTTTGA	ATTTTACTTA	CATTTACACA	360
CACACGCACA	CACATATGTA	TATACACATA	TCATTTTAAG	AAGCTGAGGA	TCACTAATTC	420
AGATAATGTA	TAAGTTTCCC	AGTGATTCTC	AACCTCTTTG	AATTTTACTT	ATAATTACAT	480
ACACACACAC	ACTGCTACTT	ATATAAATGT	TCTCATGTAA	TCATGGTAAC	AGCTCAAATT	540
CCCAAAGCAA	GGGAAGACTT	CTCATTGTCA	GTTAAACCTG	TTAAACATG	AAAATATTCA	600
TTGAGCCTAG	TTCCTTGTTA	TAAATACAA	GAAATAAGAC	ATTCAGGCAT	TTTCCCTTTA	660
TGAAGATGTT	CAGTCATCCT	TTCCTTGAAC	TACAAATTAGG	AAAAGTATAT	GTCTTTATTCT	720
CATTGAAGTT	CTCGAG					736

## (2) INFORMATION FOR SEQ ID NO:1306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC	AAAGAGGCCT	ACAGCAATAT	GCATCTTGCA	CGTCTGGTCG	GCTCCTGCTC	60
CCTCCTTCTG	CTACTGGGGG	CCCTGTCTGG	ATGGGCGGCC	AGCGATGACC	CCATTGAGAA	120
GGTCATTGAA	GGGATCAACC	GAGGGCTGAG	CAATGCAGAG	AGAGAGGTGG	GCAAGGCCCT	180
GGATGGCATC	AACAGTGGA	TCACGCATGC	CGGAAGGGAA	GTGGAGAAGG	TTTTCACGG	240
ACTTAGCAAC	ATGGGGAGCC	ACACCGGCAA	GGAGTTGGAC	AAAGGCGTCC	AGGGGCTCAA	300
CCACGGCATG	GACAAGGTTG	CCCATGAGAT	CAACCATGGT	ATTGGACAAG	CAGGAAAGGA	360
AGCAGAGAAG	CTTGGCCATG	GGGTCAACAA	CGCTGCTGGA	CAGGTTGGGA	AGGAGGCAGA	420
CAAAGTGATC	CATCATGGGG	TCCATCACGG	GGCCAACCAG	GCGGGAAGTG	AGGCAGGGAA	480
GTTTGGCCAG	GGAGTCGACA	ATGCACTCGA	G			511

## (2) INFORMATION FOR SEQ ID NO:1307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC	AAAGAGGCCT	AATTTTCCC	CACACCACAC	CACTGTCCTC	TGTGCCTGTG	60
GAAACCACTC	AAATGCCTCT	CCCCAAGCCT	TCTTTCAGTA	ACAACCATCT	CATCCGTTG	120
ATTACTGTAG	CTTTCGGCCT	GTATAACCCC	TCCTTATGTC	ATGCCTGTAC	CAGATGTTCC	180
ACTGCATCTG	TATCCACCA	GATTGCACAT	ACTCTCGAG			219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC	TGGCCCTTGT	GGATACTTTC	TAGGTGATT	GAGGAGGAAA	GGCACAGCCA	60
TGTCTCCTAA	AGTTAACAAG	CACTAAGCTT	TCCCAAGTAG	TGAAATGTCA	AGCCTCTGCT	120
TCTGTCACTT	ATTTGTTTAT	TCAGCAGAAA	GTCACTGAGA	GCCTTCTGTA	CACCAAGCAC	180
AGTGCTGGGC	AGTGAAAGAG	ACAGACATGT	CCCTGGATCC	AGGGAGGAGA	TGACCAAGTG	240
ATGGCTGTCA	GGCCAGACC	TTGCTGTTTG	TCTGCAGCCT	CTTCCCTCAG	GCAACTTGTT	300
CTCTATCAGG	AGAAATGAAA	TAATTATTAT	CTGGAGCTCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC	TTCATGCCTA	AAAAGGGTCA	GAGGAAGGCA	GTATCCTTGG	GGTGTGCTG	60
AAGTTGAAAA	TGGTGAACAT	TGTGATTTTA	CAATCCTAAG	AAATATGTTG	ATAAGAACAC	120
ACATGCAGGA	CTTGAAAGAT	GTTACTAATA	ATGTCCACTA	TGAGAACTAC	AGAAGCAGAA	180
AACTTGAGC	TGTGACTTAT	AATGGAGTTG	ATAACAACAA	GAATAAAGGG	CAGCTGACTA	240
AGAGCCCTCG	AGTTGCAGGG	AGCCAGATC	ATGCCACTGC	TCTCCAGCCT	GGGTGACAGA	300
GCAAGACTCT	GTGCCCCCCC	CCCACCCCAA	AAAAAAAGAA	AACAAAAATT	AAAATCTTTA	360
GTTACTGTAT	TATTCAAAAA	TGTCTACTTT	CAAGAAAAAC	TACAGCCATG	CAAAGAAACA	420
GTAAAAATGTG	ACCATACTCA	GGAAAAAAG	CAGACAATAG	AAATGGCTTC	TCAGTAGGGC	480
TATATGTTGG	ATTTAGCAGG	CAAAGACTTC	AGAGGCCTTT	TAATAAGTAT	ATTCAAAGAA	540
TTACAGGAAA	ATATGAAAAC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA	60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGCG TTCTGTTTAG CATGCTATCC TGTGTGAAAG AAAGTAAAT CCAATATTAT	60
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG	105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 407 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG	60
AGGTCCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG	120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT	180
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCTTC AAGATGTCAG CAAAATGTGA	240
TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT	300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC	360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG	407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 292 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG	60
---	----



```

GTTCAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC 120
CTCCCAGCCT TTGCCTTTT TTTTTTTTTT TTTTTTTTGA GGAGGAGAAT TAATTGATAC 180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG 240
GATTCAGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GCGATCTCG AG 292

```

## (2) INFORMATION FOR SEQ ID NO:1314:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC 60
AAACAGATCT TCACTAAGTC CTA CTACTGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG 120
CAGTGAGAGA AAAACAATC ATTATGGAGA GAGCAATGAT AAAATTCTTA TCAGAACAGT 180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC 240
AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTTAGTAAAG ACATTCCCAG 300
ACCCTCGAG 309

```

## (2) INFORMATION FOR SEQ ID NO:1315:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTTG 60
TATTTT TAGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGGTCTCAA CTCCTGACCT 120
CAGTGATCCA CCCGCCTTAG CCTCCCAGAG TGTTAGAATT ACAGGCGTGA GCCACTGCAC 180
CCGGCTGGGA AACATTTTAA AAACGGCGCA GGGTTGTCTT TGAAAGTCCC AGGTTTCTCTC 240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC 300
TGGCTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAACTCA GGTGTTTCATG 360
TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCTCT ATTGGAGAGC AGCAAATGAC 420
TGTTCAATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG 469

```

## (2) INFORMATION FOR SEQ ID NO:1316:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA 60
AAGGTGAATT TTATTTCGTG ATAAATTAAA AAGTAAACA AAAGAGACAA AAATAGTAAC 120

```

CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

## (2) INFORMATION FOR SEQ ID NO:1317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGGCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTTCATGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA	120
ACCAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTAACCC AGACAACCAC CTACGAATTT AAAGCTCCTA TAAGTTGCCC	240
TTTCTGCATC CGAAGTGTGA TATTGAAAG TTA AAAACGT TATCTTACAT ACATAGATCT	300
TAAAACGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCCTGGGGC CGGGTTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC	420
CTCATCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGACTTGGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

## (2) INFORMATION FOR SEQ ID NO:1318:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 451 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAACCTCTA	60
CTTTTCCTAC AAAACCCTAC CCACATGGCC CTTCTGCGG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGGCTA TCTTCCCAG	180
ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCCTGCAT	240
GTAGTTGGTC TTCCTGGTTG CTTCTTGCCC CTGTGGCTCC CTTGGGAGAC TGA AACTCAG	300
AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCCACAGGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGCCCA CAGCCTCGA G	451

## (2) INFORMATION FOR SEQ ID NO:1319:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 477 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT ACACTACGGT ACTCCCAGCA TATCACCCCTT AATGTAACCTT      60
TAAATAACAT GGCCATTTTT TAAAAAGGAC ACAGGAACTA CATAACATTT TTTTTCAGAT      120
TTTGAAAAAT TCTAAATATG TCTAGAAAAA CTTTCTTTTC TGTTCATTTC TCCTTCCTAT      180
TCTCCATGAC CCCCTCCCCG CGGACTGTAT CAGGTACAGC CTGTTGGAAA TCCAGCACCG      240
CACATTAGGC ACACCACTGG TAAGTTTACT TGTTGAGTTA TCACCTTTTT TTTCTTTTA      300
ATCAGAGAGG CAGCTCTGTG TTGAAGATGC TAGGTAGTGA TGGAAAAGAC ATTAGGAAAA      360
TTTGTTACCG TGGTAACCGG GGATGGACAT CATGACCTTT TGTGATATGC ATGCTGTGGC      420
CTTGGTAGTC TCTTCCCCTA ATTAACATCC TGTGAGAAAC GTGAGAGATG ACTCGAG      477

```

## (2) INFORMATION FOR SEQ ID NO:1320:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT AGACGGAGGC TGGAGATTCA CATGGGGCGA GGAGTTGCAG      60
ACCAGCCTGG GCAAAGCATG GTGAGGCCCC GTCTCTGCAG AAATGAGAAA ATGAGCTGGA      120
TGTAAGTGCA CCGACATGTG GTCCCAGCTG CTGGGAGGGC TGAGGTGGGA GGATTGCTTG      180
AGCCTAGGAG TTCAAGGCTG CGGTGAGTAG ATCGTGCCAC TGCCTCCAT CCCTGGCAAC      240
AGAGCAAGAT CATTTCTCAA AAAGAAAAAA AAAGCCATCT CGAG      284

```

## (2) INFORMATION FOR SEQ ID NO:1321:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCGGCC TTCATGGCCT AGGGAATGT GTGATTGGGA AAGAGGCAGC TTTTAAAAAT      60
GTGTCTGGCC TTTGACCACG CAATTTCACT TTCCAGTATT TATTCTAGGA AAATACTCAT      120
ACTATTGCAA AGTTTATATA TAAAGATAGT TATAACTGCA TTGTTTATCA TTTACAAAAA      180
GAAAACATCT GAAAGCCCAA CAAGACGGAA CTGGTTATTC CACATTGGCA CATTCATACA      240
AGGCAATGCT CGAG      254

```

## (2) INFORMATION FOR SEQ ID NO:1322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GAATTCGGCC TTCATGGCCT AGGCACAGAA AAATTGAAA GGATTGGTGG TCGTACATCT      60
TGCAGCTCAC TTAGTAGCTG CATGCATGTA GACCGGTGG TGTGATGCA GTGTTGACTT      120

```

```

GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA 180
GAGGTTGGTG CAGGGAAACT CTGTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG 240
TCTGCCCTGGT CTTTGGGGGG TCAGGTGGAG ATGTCCTTTT GGAAAGGCAG CCATTCTCTT 300
TGAGTGTCCA GAGGGCATGG TGCAGGCACA TGGATTGAGT GGAGGACTCG AG 352

```

## (2) INFORMATION FOR SEQ ID NO:1323:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA 60
TTATTCCAGT ACTTTGACTG CTAGTATTGC TGTTGAAAAG TCTTAATTGC CCTTCCTTTG 120
TAAGTAATAA CCCTTTTATT TGGCTGTGTT AAGCCTTTTT TTTTCCTTCC CATTAGTGT 180
TTTGCACTTT TGTATAATGT ATTGAGGGCG TTATTTTTTT CATTCCATCA TTTTATTTTT 240
TGTAATCCCA CTTGGGATTC TTTGGGCTTC CTGGATCTGA GGATAATAAT AATGCTTTTG 300
AATAATTGTG GAAAATTCTT AACCATTATC TCTTTGAATA ATGCCTCTTA TTTTCTCCTT 360
CTATAACTCT AATTAGACAT ATAGTCTATT TTTCATGTTA CTTATGCCTT TTCATCCTTT 420
TTCGTCTCCA CATACTCGAG 440

```

## (2) INFORMATION FOR SEQ ID NO:1324:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TAAAATGCCC AGTTACCTGA 60
AATTGTATAA ATTCTTGCCA AAAGTGTGTT AACTTAATAC AAACCTCCCA TCTCTTACCT 120
CTTAGCACTG TGCTCATCTT GAGGGGACAT AGTCCCAATT TTGTATTTTA TATAATACTG 180
TTAATGAATA TGTGTAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA 240
AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG 280

```

## (2) INFORMATION FOR SEQ ID NO:1325:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```

GTTTCCTTTT CTACTTACAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTATTTCTT 60
TGAGACAAGC CATTGTAAAT TGTACTAGA CTAAGTAGTA GTATACCAGT CATTGACTGG 120
TCTTTTCAAC TCCACTCAAA TTTGTAAAAA GCAATTCCTC TTATACTATC ATCTTTTTTG 180

```

TTTTTAAGG TTTTGTGT TGTGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240  
 TGATCTAAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAAC CCAACTCCTA ATTATTTTAA 60  
 AAATCTATGC ACTTCTTTCA CTGGAATTC TATGCCCTCA TAGACTTTAC AGGCACATGT 120  
 TCTATACCA ATTAAGAGAA ATTTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180  
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240  
 TCAGTGAACA TTGTTGGGCT GACCTAATTT TTTGAAATAA GTTGGCCATC AGTGTAATTG 300  
 ATTGAGCTAT CTGTACAACC CCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 680 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60  
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAAGGACT TCAAACTCTA 120  
 CTCCCACTAA TAGCTTTTGG ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180  
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240  
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300  
 ACCACTAACC CTCGAGACCA CTTTATATAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360  
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420  
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTCAT GGAAAAAAT ACATAAATGT 480  
 ATAACAATCT TCATTTGTGA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540  
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGA AAAA 600  
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660  
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 499 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

GAATTCGCGG	CCGCGTCGAC	TGCTACTGAG	CTTCTTGGCT	CTCTTATATA	TATTCTTTAT	60
TGTCATTTAC	TTTGGTGGAC	GAAGAGAAGG	AGAGAGTTGG	AATTGGGCCT	GGGTCCTCAG	120
CACTAGATTG	GCAAGACATA	TTGGATATTT	GGAACCTCTC	CTTAAATTGA	TGTTTGAGAA	180
TCCACCTGAG	TTGCCAGAGC	AGACTACTAA	AGCTTTACCT	GTGAGGTTTT	TGTTTACAGA	240
TTACAATAGA	CTGTCCAGTG	TAGGTGGAGA	AACTTCTCTG	GCTGAAATGA	TTGCAACCCT	300
CTCGGATGCT	TGTGAAAGAG	AGTTTGGCTT	TTGGGCAACC	AGGCTTTTTC	GAGTATTCAA	360
GACTGAAGAT	ACTCAGGGTA	AAAAGAAATG	GAAAAAACA	TGTTGTCTCC	CATCTTTTGT	420
CATCTTCCTT	TTTATCATTG	GCTGCATTAT	ATCTGGAATT	ACTCTTCTGG	CTATATTTAG	480
AGTTGACCCA	AAGCTCGAG					499

## (2) INFORMATION FOR SEQ ID NO:1329:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

GAATTCGCGG	CCGCGTCGAC	CGCTGCCAAA	TGCTTCACTC	CTATCTACTC	TCCCGATTCC	60
TTTACTTCT	GAACCTCCTC	AACAGAAATC	TTGCTCTCTC	CCTAAATCCT	CAGTGCAACA	120
TACGTCCGCA	AAACTAAAT	GATCCCTCCT	CAGCCAGACA	GAAACTCTC	AACATATCAA	180
CACTCCCAAG	GCGTGGACAG					200

## (2) INFORMATION FOR SEQ ID NO:1330:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

GAATTCGGCC	AAAGAGGCCT	ACAGTCTTTT	TAGGCATGTT	TTTTTTTTTT	TTGGTGTGTG	60
TGATGACAGG	AATATGCATT	TTATCTGTAG	TGGTTTTAAA	TCCTGTATTA	AGCGTTGTTT	120
TCTTTTCAGA	CTGCAAAATT	CAAAATGGGG	CTCTCGAG			158

## (2) INFORMATION FOR SEQ ID NO:1331:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 552 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

GAATTCGCGG	CCGCGTCGAC	GATCATGAAG	CGCTCGGTAG	CCGTCTGGCT	CTTGGTCGGG	60
CTCAGCCTCG	GTGTCCCCCA	GTTGGGCAAA	GGTGATATTT	GTGATCCCAA	TCCATGTGAA	120
AATGGAGGTA	TCTGTTTGCC	AGGATTGGCT	GATGGTTCCT	TTTCCTGTGA	GTGTCCAGAT	180
GGCTTCACAG	ACCCCAACTG	TTCTAGTGTT	GTGGAGGTTG	CATCAGATGA	AGAAGAACCA	240

ACTTCAGCAG	GTCCCTGCAC	TCCTAATCCA	TGCCATAATG	GAGGAACCTG	TGAAATAAGT	300
GAAGCATACC	GAGGGGATAC	ATTCATAGGC	TATGTTTGTA	AATGTCCCG	AGGATTTAAT	360
GGGATTCACT	GTCAGACAA	CATAAATGAA	TGCGAAGTTG	AGCCTTGCAA	AAATGGTGGA	420
ATATGTACAG	ATCTTGTTGC	TAATATTCC	TGTGAGTGCC	CAGGCGAATT	TATGGGAAGA	480
AATTGTCAAT	ACAAATGCTC	AGGCCCACTG	GGAATTGAAG	GTGGAATTAT	ATCAAACCAAG	540
CAAATCCTCG	AG					552

## (2) INFORMATION FOR SEQ ID NO:1332:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 760 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGCGG	CCGCGTCGAC	CTCAGAACTA	TTTAAATTTA	GTAAATTAC	TATTATATTT	60
TATAGTAAAT	ATTGGTCCAC	TTTATAGCTC	AGAACCTAAA	AAGAGAATAT	GTACCCAAAC	120
TTCTCTATGT	TTACAACCAA	CCCAGAGTTT	AAGATTCTGA	ATTGTGCTTT	GTTTTGTATA	180
AAATTTAACC	AAGGGTCAGG	CACAGAGGCT	CATGCCTATA	ATCCCAGCGC	TTTGGGAGGC	240
CGAGGCGGGT	GGATCACTTG	AGTTTCAGGAG	TTCGGGACCA	GCCTGGCCCG	CATGGTGAAA	300
CCCCGTCTCT	ACTAAAAATA	CAAAAGTTAG	CCGGGTGTGG	TGGCATGTGC	CTGTGGTCCC	360
AGCTGCTTGG	GAGGCTGAGG	CAGGATAATC	NCTTGAACCC	AGGAGGCAGA	GGTTGCANTT	420
GCAGTGAGCC	GGGATTGTGC	CATTGTACTC	CAGCCTAGGC	AACAAGAGCG	AAACTCTGTC	480
TTAAAAAATA	AAAAGAAAAA	AAAATTAACC	AAGGTTCTCC	TTTCTCTAAA	TCTAGCAATT	540
TGTTCTATTT	TTACAGAAATA	AACTTAATAA	TTTAAATACA	GATTTTAGCT	TTGGCTTTTT	600
TCTTACTTTT	TAGTTTGCAA	ATTATTTTAT	GGTATTCCTA	CAAAGTAGAT	ACAAATTTGC	660
ATTCAGAAATG	CACCTTTTGT	TTTTCTGGGT	TTTTTTGTTT	GTTTGTGTTT	TTTTTCAGAA	720
AACTCATGGA	AAAGTACACT	GTTACCTCA	GCATCTCGAG			760

## (2) INFORMATION FOR SEQ ID NO:1333:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 579 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCGGCC	AAAGAGGCCT	ANAACTGGGT	AAGGAGCAAA	AAAAGTGACA	GAGGCCAGGC	60
GCGGTGGCTC	ATGCCTACAA	TCCCAGCACT	CTGGCCAAAT	ATTTGATTTT	AAATTTCCAT	120
TGTTACTGAT	TAAAAAATAA	AAAAATCTGG	ACCAGTTAAC	CTGGAGATTT	AGAGGCTATA	180
GACACAATTT	AACATCCATA	CAGGCCTGTG	AACTTCATGC	AGAGAACAAA	CAACAAACA	240
AAAACCTCTA	TTCAGAGTCT	CTCATTTCAG	CTTAGCCAAC	ACATTTGGAG	ACTTAGGGGC	300
CAGTTCTAGA	AGCTGCTTTT	ACCTCTAGAC	TCGGAGGGGC	AGGCCCTGTC	ACCGAAGGGA	360
GGAAAACTCT	TCTTGGCTGT	CAGCCCGGAT	TGAAGCCACT	TCGCTTCCCC	TGGCCCCAGC	420
TTTCCTGCAC	TCTTTTCACC	GTGTCTGACA	CAGGGCAAAC	CACCAACCAC	TCAAATGAGC	480
AAACAATTCC	AGAAAAAAGA	ATCCGAGATA	AAGAATAACC	AACTAGGAGT	CTTTCCATTG	540
TAGCCTAAAC	CGTCGATTGA	ATTCTAGACC	TGCCTCGAG			579

## (2) INFORMATION FOR SEQ ID NO:1334:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

```
GAATTCGCGG CCGCGTCGAC CAACAAGGGC AAAGGCCTTG AGACACAAAC CAACTGTGTG      60
GGTGTAAGG TAAGAAAGGC CAGTGAGGCC AGCATGATGA ACTGGGGGAG CATGGTGGCT      120
GATTTGGTCA GGAAGGGAAC AGAAACCAGA CCACTGGGA TCTTCTAGCC AGAGTAAAGA      180
GACTGAGTTT ATTCTATTG TAATGGGGAG CTATTCAGAG AGGTAAATCA TGGAAAGTAT      240
GTGACCTGAG CTACACTCTT AAAAGATGCC TCTGGCTGCT GTGTGGAGAA TGAACCATGG      300
GGGCAAAAGC AGAAACAAGA AGACCACTTA AGAGGCTCTT GCAATAATTT ATGTGAGAAG      360
AGTGATCATC TTGACTAGGG TGGTGGTGGT AGAGGAGGTG AGTGGTGGTC AGGACTGAGA      420
GGAGCCAACA GAATTTGCTG GCTTGCTTGG ATGTGGGTGA TGAGGCAAAC TGAGAATCCA      480
AGATGGCACC AAGGCTTATA CCCTGAGCAA CTGAACTCGA G      521
```

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

```
GAAATTCGCG GCCGCGTCGA CGCTCTTGAG TGAGACCCAA CAAGCTGCTT TTCACCAAAT      60
TGCAATGGAG CCTTTCGAAA TCAATGTTCC AAAGCCCAAG AGGAGAAATG GGGTGAACCT      120
CTCCCTAGCT GTGGTGGTCA TCTACCTGAT CCTGCTCACC GCTGGCGCTG GGCTGCTGGT      180
GGTCCAAGTT CTGAATCTGC AGGCGCGGCT CCGGGTCTCG GAGATGTATT TCCTCAATGA      240
CACTCTGGCG GCTGAGGACA GCCCGTCCTT CTCCTTGCTG CAGTCAGCAC ACCCTGGAGA      300
ACACCTGGCT CAGGGTGCAT CGAGGCTGCA AGTCCTGCAG GCCCAACTCA CCTGGGTCCG      360
CGTCAGCCAT GAGCACTTGC TGCAGCGGGT AGACAACTTC ACTCAGAACC CAGGGATGTT      420
CAGAATCAAA GGTGAACAAG GCGCCCCAGG TCTTCAAGGT CACAAGGGGG CCATGGGCAT      480
GCCTGGTGCC CCTGGCCCCG CGGGACCACC TGCTGAGAAG GGAGCCAAGG GGGCTATGGG      540
ACGAGATGGA GCAACAGGCC CCTCGGGACC CCAAGGCCCA CCGGGAGTCA AGGGAGAGGC      600
GGGCTCCCAA GGACCCCAAG GTGCTCCAGG GAAGCAAGGA GCCACTGGCA CCCCAGGACC      660
CCAAGGAGAG AAGGGCAGCA AAGGCGATGG GGGTCTCATT GGCCCAAAAG GGGAACTGG      720
AACTAAGGGA GAGAAAGGAG ACCTGGGTCT CCCAGGAAGC AAACAGAGAC TCGAG      775
```

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

```
GTAGATTTAG ATGTACAGAT AGAGGTATGA TTTTITTTAA AGGCACCTCA GTATGGGTAA      60
TGTTATCTTT CTTGTGTTTC AGTGCACACA CATAACACA CACCATAGAT GCAAAGTGTG      120
TAGAAAATGT ATTGAAGGAT ACCCAGGTAC TCGAG      155
```



## (2) INFORMATION FOR SEQ ID NO:1337:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```
GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT    60
CTTTTTCCTC TTTTCTTCC AGTTTAGTT TATGAGATTG GGTCTTGCTA TGCTGCCCAT    120
GCTAGGCATG AACTCGAG                                         138
```

## (2) INFORMATION FOR SEQ ID NO:1338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 249 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG    60
GAAGCCTTCT CTTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTCGGAT GGTTCCTGGT    120
CTGTTTCTTT CTTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTCCCAG AATGACGGTC    180
CTCTCATTTG ACCGTGTGCT TTCCGAAGCA CCTGCTGCCA CCTTGTCTCG GCGATCCCGG    240
TTACTCGAG                                         249
```

## (2) INFORMATION FOR SEQ ID NO:1339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 108 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```
GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG    60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG                108
```

## (2) INFORMATION FOR SEQ ID NO:1340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 652 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTC	TGATTTTAC	CTCCTTAGGC	CAGCCTTTAT	TATTGCCATA	120
TAAGCCTTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCTCCATC	180
TCCGGATTCC	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGACCTCT	CAGCCACTGT	300
TAACATTAAA	CATAAAGAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCTTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	AACCTCTCAG	ACAAAAAACA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGCC	CAGGCTAAAG	AAAAAGAATC	TTTGCGAGAA	GATACTGCAG	ATTCCAGTGC	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

## (2) INFORMATION FOR SEQ ID NO:1341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTCGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACATTTC	TCTGGCTTTC	TGTAGCCTTC	TGCTTTTCAG	CGTTGCCACA	CAATGTCTGG	120
CCTTCCCCAA	AATAGAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCGGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AACTGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCA	ACATCATTAA	300
ATAAAGCATT	CTCGATTAAAC	AAAGAAACCC	AGCCTGGACA	AGCTGGGCTC	ATGCAAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTTGG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANTT	GCCAAGGCCA	TGTTAACCAT	480
TGCTATCACT	GCGACTCCTT	CTCTGACTGT	TGATGAAAAG	GAGGAACTCC	TTACAAGCAC	540
TAACTTTCAG	CCCATTGTAG	AAGAGATCAC	AGAAACCACA	AAAGGTTTTT	TGAAGTATAT	600
GGATAATCAA	TCATTTGCAA	CTGAAAGTCA	GGAAGGAGTT	GGTTTGGGAC	ATTACACCTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTGGAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTCC	TGGTGCTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAGCA	CCTCGAG			817

## (2) INFORMATION FOR SEQ ID NO:1342:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCCTAC	60
TCCTGGGGAT	CCTCACCCCTC	AGAGCCTCTT	CTGGACTTCA	GCAAACCAAC	TTCTCCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCAG	CTGGAAAGTT	CCAGATCAGT	TCTGGATTC	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCTC	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTTGAGCC	CGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420  
 TCACGTGTAA GACCCAGCT TCAAACATTT CTAACAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CCGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAAGTGGGA 60  
 AATTATTTTG GGTCTTCTTC TTAATCCCAT ATCTGGACAT CTGGAACATC CATGGGAAAG 120  
 AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA ACACTCCATC TTAGCAGGAG 180  
 ATCCCTTTGA ACTAGAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGGT 240  
 GCAAGCTCAA TGGAACAACA TGTGTA AAC TTGAAGATAG ACAAACAAGT TGGAAGGAAG 300  
 AGAAGAACAT TTCATTTTTC ATTCTACATT TTGAACCAAGT GCTTCCTAAT GACAATGGGN 360  
 TCATACCGCT GTTCTGCAAA TTTTCAGTCT AATCTCATTG AAAGCCACTC AACAACTCTT 420  
 TATGTGACAG GAAAGCAAAA TGAAGTCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT 480  
 GATGCTCACC TTAAGAGTGA GCAAACAGAA GCAAGCACCA GGCAAAATTC CCAAGTACTG 540  
 CTATCAGAAA CTGGAATTTA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG 600  
 TCTGAAGTTT ATTCTAATCC ATGCCTGGAA GAAAACAAAC CAGGCATTGT TTATGCTTCC 660  
 CTGAACCATT CTGTCATTGG ACTGAACTCA AGACTGGCAA GAAATGTAAA AGAAGCACCA 720  
 CTCGAG 726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTT TAGG 60  
 TCACCTTCAT CACAGACTGC TCCAAAGGCA GAGCAATGTG GAACGAACCA GCACATTAC 120  
 TTAAGATCAA AGTATGATAC ATCTCTTTGA GCGCCTCACT TCACAATAGG GATCCATTCA 180  
 TTGGCTTCCA GATGATGTTT ACAGTTTCATG TAACACTGAT ACTGACTTTG TTCCTTATGT 240  
 TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAGAACA GAGCCACTTA 300  
 TTATCCACAA AAGTTGCATC AACCAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT 360  
 ACTCAAACCTG AATCCTATAG TGTGGAGCAA CCAAACAGAA AACAGTCCAA GGATT CAGGA 420  
 AATGGTAAAA ACATTTTAAA TCTAAATAGT AGTTATTTTC ATTTTGTCTT GCTCCACCT 480  
 CGAG 484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG	60
AAATAGGATT ATGTGGGCTG GGCACAGGGA CTGACGCTG TAATCCCAGC ACGTGGAGGC	120
TCGAG	125

## (2) INFORMATION FOR SEQ ID NO:1346:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC	60
TACTGTGTGT GGATTCAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA	120
AAGGAAGTCT CCCTTACAAA GGCCCAAGCTG GGGTTAGAAC TGAAGAAGT AGAAGCAGCA	180
GCACTGCTTG TCCAGGAGGA AGAAACTGCA TTAAGAGCAG CCCATTTCAGT TTCTGGGCAG	240
CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTCGGAGG ACTCAGACAG CAGCGTGTCA	300
TCTGGAAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT	360
GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT	420
GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA	480
CTTGCCCTCTT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAACAA	540
CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAA CCGCAGCAAT	600
ATTCAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTCAT	660
TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCTTC ATTTTCACTT	720
TGTAATTTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG	760

## (2) INFORMATION FOR SEQ ID NO:1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

GAATTCGCGG CCGCGTCGAC CATTTGAGGA GTCCGTCTTG TAAATGTTG GCACTTTGCT	60
ACTTTATGTC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGGCG GAGAAAGGCA	120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCTTCC	180
CGCCCGCTAT TTCTATATTC AGGCAGTGGA TACATCAGGG AATAAATTCA CATCTTCTCC	240
AGGCGAAAAG GTCTTCCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG	300
AGTCCAGGTT TTAGACCGAA AAGATGGGTC CTTCATAGTA AGATACCTCG AG	352

## (2) INFORMATION FOR SEQ ID NO:1348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGCGG	CCGCGTCGAC	TCTAGGTTTT	CTGATTTTGA	TGGAATATG	GTATTCTGGG	60
AAATATCTGT	CCAAATTATC	CTGATCTCTG	AACCTCTGCT	GTTGAGGTCA	GTCACCTCAC	120
ACAATACCAT	GATGACAGCT	TTATCAAGCC	AGATGCTTAG	TCAGAGCTTT	CCAAGACCCA	180
GCTTTGGTTT	TATCAGCAAA	ATCCATCCTT	CCCACCCCCC	ATACACACGC	CAGTTTGAGA	240
CTCCTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGCGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TGGACCTCCT	GTGCAAGAAC	60
ATGAACCATC	TGTGGTTCTT	CCTTCTCCTG	GTGGCAGCTC	CCAGATGGGT	CCTGTCCCAG	120
GTGCAGGTGC	AGCAGTCGGG	CCCTAGACAG	GTGAAGCCTT	CGGAGACCCT	GTCCCTCAGT	180
TGTACTGTCT	CTCTCGGCGC	CATGAATGGT	CATTACTGGA	CCTGGATCCG	GCAGACCCCG	240
GGAGGGAGAC	TGGAGTGGAT	TGGATCTGTC	TATTATAATG	GAAACAGAGT	GTATCACCCC	300
TCCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGCGG	CCGCGTCGAC	AATTACTACC	ATTGTTAAGT	GTCTCTTTAA	CTAAACTCAT	60
TGTTTAAAAG	TTTTCTCCCT	CTCTGTTTCT	AAATCCAAAT	TTCTGCTCTG	GAATATATGT	120
TAGAAGAGAT	ACATTGTGTT	GAATGTTTGC	ATTTCTTTTA	TGAAATGCAG	TATCTTTTGG	180
GGAAATATTAT	GTAAATGAAA	TACCAATTAT	TTTAAAAGAG	CATTTTGTG	TGACATAGTG	240
CTTTCACAAA	CTAAACTG	AATTTCTTTC	TTTAGTCTAT	CTATATCTTT	TGAAAATGTT	300
GACACAGCTA	AGAAGAAGCT	GCCTGTTTCT	ATCTTAGATG	GTCTGACCCT	CAGTACAAG	360
GTATATGCTG	ATATTCCTTG	TATGAACCGT	GTTTCTGCT	AACATTAAAA	CATGCAAGTA	420
ATTGGTTTACT	TTCTAATTTT	GTTTTTGT	CATAGGTCCC	ATGGCCCGTG	GACATTGTTA	480
TAAGTTTGGGA	ATGTCAAAAA	ATTTATAATC	AAGTGTCTCT	TCTCTTATTG	CAAATAAAGT	540
GGGCATCCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG CCGCGTCGAC TTTATTTTCAG TGGATTCTCT AGGATTTTCT ATATAAAAGA	60
TGTCATCTGA TAGAGTAGTT TACTTCTTCG TTTCCAACCT GAATGGCTTT TATTTCATCT	120
CTTTCCTAAC TGTCTGGCT AGAACCTCCT TTACCACGTT GAATGGAAGT GGCAAGAATG	180
AACATCCTTG TCTTGTTTCT GATTCGAG	209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG CCGCGTCGAC AATGGCTTTT CTTCCTTCCT GGGTTTGTGT ACTAGTTGGT	60
TCCTTTTCTG CTTCCTTAGC AGGGACTTCC AATCTCTCAG AGACAGAGCC CCCTCTGTGG	120
AAGGAGAGTC CTGGTCAGCT CAGTGA CTAC AGGGTGGAGA ACAGCATGTA CATTATTAAT	180
CCCTGGGTAT ACCTTGAGAG AATGGGGATG TATAAAATCA TATTGAATCA GACAGCCAGG	240
TATTTTGCAA AATTTGCACC AGATAATGAA CAGAATATTT TATGGGGGTT GCCTCTGCAG	300
TATGGCTGGC AATATAGGAC AGGCAGATTA GCTGATCCAA CCCGAAGGAC AAACGTGTGC	360
TATGAATCTG GAGATCATAT GTGCATCTCT GTGGACAGTT GGTGGGCTGA TTTGAATTAT	420
TTTCTGTCTT CATTACCCTT TCTTGCTGCG GTTGATTCTG GTGTAATGGG GATATCATCA	480
GACCAAGTCA GGCTTTTGCC CCCACCCAAG AATGAGAGGC TCGAG	525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC TTCATGGCCT AGGCTCCTAA AATAAATAAT CCACATAATT GTAAATGAAA	60
CACATCAAGG ATTTGAGTTA ATAGCCTCTG AGCAGCATT AATAGCCAT TAGACTGGAG	120
TATTTGTTAT CAAGAGGGCC AGAGAACCCA CCGCTAAAGC CGTAGGGTGG GAGGAACCCCT	180
GGATTGCAGC TACATGGCTT ATGTAGGGAG TTTGTAACAG CCCCAAGCTG AAACCAGCTT	240
CTACACCCAT GACTGTTGAG TGATTGAATT CTAGACCTGC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

```

GAATTCGCGG CCGCGTCGAC CAACAAGAGC ACTGGCCAAG TCAGCTTCTT CTGAGAGAGT   60
CTCTAGAAGA CATGATGCTA CACTCAGCTT TGGGTCTCTG CCTCTTACTC GTCACAGTTT   120
CTTCCAACCT TGCCATTGCA ATAAAAAGG AAAAGAGGCC TCCTCAGACA CTCTCAAGAG   180
GATGGGGAGA TGACATCACT TGGGTACAAA CTTATGAAGA AGGTCTCTTT TATGCTCAAA   240
AAAGTAAGAA GCCATTAATG GTTATTCATC ACCTGGAGGA TTGTCAATAC TCTCAAGCAC   300
TAAAGAAAGT ATTTGCCCAA AATGAAGAAA TACAAGAAAT GGCTCAGAAT AAGTTCATCA   360
TGCTAAACCT TATGCATGAA ACCACTGATA AGAATTTATC ACCTGATGGG CAATATGTGC   420
CTAGAATCAT GTTTGTAGAC CCTTCTTTAA CAGTTAGAGC TGACATAGCT GGAAGATACT   480
CTAACAGATT GTACACATAT GAGCCTCGGG ATTTACCCCT ATTGATAGAA AACATGAAGA   540
AAGCATTAAG ACTTATTCAG TCAGAACTCG AG                               572

```

## (2) INFORMATION FOR SEQ ID NO:1355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

```

GAATTCGCGG CCGCGTCGAC TGAAAAGTAG GTTTTGAAG AGATATATTC GAAATATATT   60
TTTTCACCTG AAAAAAGTAA AAATTTTTTT CAAAAGCAAA TAATTCAACT CTAAAATTAT   120
ACTATTTCAA CATTCTCATT TATGTGAAAG CATGTGATAA ATTGTTGCTG CGTCAGAGAT   180
ATGAGAAACT CCTTGCATT AGGTGGGCAT TATTCATAGA CTTCTACATG AAAGAGAAGA   240
GAAATAAAAG ATGCACCAGG ATTCTCGAG                               269

```

## (2) INFORMATION FOR SEQ ID NO:1356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

```

GAATTCGCGG CCGCGTCGAA CCCAGCAAAA TGGGGATCTC CACAGTCATC CTTGAAATGT   60
GTCTTTTATG GGGACAAGTT CTATCTACAG GTGGGTGGAT CCCAAGGACT ACAGACTACG   120
CTTCACTGAT TCCCTCGGAG GTGCCCTTGG ATACAACGTG AGCAGAAGGT TCTCCATTTT   180
CCTCGGAGTT GACCCTGGAG TCAACTGTAG CAGAAGGTTT TCCGATTTCC TTGGAGTCAA   240
CCCTGGAGTC AACTGTAGCA GAAGGTTCTC TGATTCCCTC AGAGTCAACC CTGGAGTCAA   300
CTGTAGCAGA AGGATCTGAT TCTGGTTTGG CCCTGAGGCT GGTGAATGGA GATGGCAGGT   360
GTCAGGGCCG AGTGGAGATC CTATACCGAG GCTCCTGGGG CACCGTGTGT GATGACAGCT   420
GGGACACCAA TGATGCCAAC GTGGTCTGTA GGCAGCTGGG TTGTGGCTGG GCCATGTGCT   480
CTCCAGGAAA TGCCTGGTTT GGCCAGGGCT CAGGACCCAT TGCCCTGGAT GATGTGCGCT   540
GCTCAGGACA CGAATCCTAC CTGTGGAGCT GCCCCACAA TGGCTGGCTC TCCATAACT   600
GTGGCCATGG TGAAGATGCT GGTGTTATCT GCTCAGCTGC CCAGCCTCAG TCAACACTCA   660
GGCCAGAAAG TTGCCTGTC AGGATATCAC CACCTGTACC CACTAGACTC GAG                               713

```

## (2) INFORMATION FOR SEQ ID NO:1357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 925 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```
GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTTGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCCATTCTT      240
TGGTCAGCAT GGTTTTAATT TCTTTCCAG TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCTCAA      420
TAAGGCTCCT GGCATGAATA CTATAGACCA AGGGATGGCA NCACTGAAGT TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTT CAAAAGTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGCC TCCAGCCACC ATTGCTCCTC CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAACTGA AGACCAAGAA      660
TGGCATTGCA GGGTCAAGTC TTCCGCCACC CCCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACAATA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925
```

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```
GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTGACC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG                                         172
```

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```
GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTGGAGG TCACGCGGCT      60
AGTAATTGGA GCCTGGTTTA GAACCAAGTC AGTCTCATT CAGAATCCAG AACCAAGTAT      120
TTGTAAGTGA TGCACTTGTC TCCAAAGGGA TCCAGCACTG GGTCTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCCACT TGGATGGCAG AGCCTGGCAT      300
```



```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC 360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTCAGAAA GAAAACTCGG 420
CTATCTTACA TCTCCTCTCC CCTGTTTATT TGAATAAGT GAAGTTCATG TGGCTTGAGC 480
CTCGTTTCCT GGGGAAATCA GCCTGGCTTA GGATTCATT GTCTTCTGGG ACTGGGAAGA 540
TGTGGAAGGC TGACCTCAGC CCCAGCTGAA GGTCACCTTC CCAGACTCTG AGCTCGGCTG 600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC 660
ACTGTCTCGG TGTCCCTGCT GCCTGTCAGT AATGTGCCCA GCACCTTCTG GTGTCATGTC 720
CCCTCTTGTT TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG 770

```

## (2) INFORMATION FOR SEQ ID NO:1360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGGG AACCTTTAAA CCCTAAAATC CAGGAAAAGA 60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG 120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC 180
TGAAATGTG CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGTGTC 240
CACAGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCCCTT 300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAAT TTTCACAACC TCCAACAGAA TAGACAGAGA 360
AAAACCTCTG GCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTTCTTTG AACTTGAGGT 420
GGTGATCCTC CCCAATGATT TCTTCAGGCT GATCAAAATA AAAATAATTG TCAAGGATAC 480
CAATGATAAT GCCCCAATC TCGAG 505

```

## (2) INFORMATION FOR SEQ ID NO:1361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTTGTTT TCTCCAAACC AGAAGACCTT AGGTACAGAT 60
GACCCCGAGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG 120
TGTCATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTACAGAAT GTGGTCCAGA 180
ATTGCCCACT GGTGTCCTGT GCCCTGGTGG ACCCCACAGA GGACTGCCCC AGGCTTTTAC 240
TTTCCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGGTGGCCAG GAGGGGCAGA 300
ACGCTGGCGG GGACGGGGAA GCCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC 360
ACTGCAAGAC GGCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA 420
GCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTCGCGT GTGTGACACA 480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCTC CCCCATTCTC ACCCTCTCAC 540
CACGCCCCCTC GAG 553

```

## (2) INFORMATION FOR SEQ ID NO:1362:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAACTC CAGCAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTACCAGC CAGTCCTCCA GGTTC AATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTTAAT TGGCCACCAG      480
AATTTCTGTC CTGGTGAGCC ATGGAAAGGT TATCCAAACA TTGACCCTGA AACTGACCCT      540
TAGCTCACTC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCATCC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGCACAA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGGAAGGTC CCTTTGCCAC CTA AAAACAT CACTGCTCCG      840
TCCCGCCACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT ACAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAATGTAT CTTTTTTTTT TTAAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTGGGA ACAGAAATGA ATTAATGATT      300
TTTTTGATA ATATCCAACA TGTCCACTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACTTAG GACAAAGTAT CTGGTTAAAA TGCTGTTCAT TTAAATAAAG      420
CCCACTCTCC TTA CTTTAGA GCTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCAGT      480
TGATGACCAC TGAAAAACAC GAGCCCTTTC AACAAATGTT CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTA CACT ACCAAATTCT GCGGTCAGCT      600
TTCCAAGAA CTA CTGGGGA AAGTTTCAAT GCTGCAATC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

```

```

GTAAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG      120
CATAATTGGA GCATTTGCAT TAATCAACAA ACTCACATTG AGACAAAACCT TAGTTTTACA      180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC      240
TTTGGAAGT AGTTACTTGG AAACCTTGTA AGGTATTACA TTTTATATT TAAACACCTA      300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA      360
TCTGTCTTTT GTGAAACATT TTGAAATAT GTATATATAA TATTGTATAT GCAAATTGTG      420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTCTTTAT ATTTCTGATA ACTTGTTTTG      480
CATATGACCG GCACTTCTCG AG

```

## (2) INFORMATION FOR SEQ ID NO:1365:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGAAGGCGA AGAAAAGAAT AGAGAAGATA      60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAA GATAAATTTA AACCTGAAAA      120
GTAGGAAGCA GAAGAAAAA GACAAGCTAG GAAACAAAA GCTAAGGCA TCGATTGAAT      180
CTTAGACCTG CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1366:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTCGGCC TTCATGGCCT AGGCCTGGG TGGGACATTT TGTGTGTGAG AAGCCTGGAC      60
AAGAGGACGA GGTGCACACC ATGTCAGTCA CGGATTTGTG AACTCACAGG AGAGGGTTGG      120
ATAGGGCGTG TGAACGTGAG CCCGCGTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG      180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT      240
GCAATGTAGA CGATGCGAAG TCGTGGTAAC GGGTGGGCTT GTGACGGCAC CCGCTGCTTG      300
CAGCCTAACT CGAG

```

## (2) INFORMATION FOR SEQ ID NO:1367:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT      60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAATATG TGCTTCCAAA GTTTTTTCTA      120

```

ATTTTTCAC T AACCTTTGAT TTGGTATTTA ATTTTITAGTT GTCAGAAGTT TTTAATATTT 180  
 GTATCATCAA AGCTATCAGG TTATTAAAT TGACTTCTCA TTTAGACATA CTTAGGCCAT 240  
 GAAGGTCGAG 250

## (2) INFORMATION FOR SEQ ID NO:1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60  
 TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120  
 CTTGTGAATT AACATCCTGA CTACTTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA 180  
 ATAATAGTGT TTTATAGGCT CCTGAGAATA GGTTTACTAA AGTCATCGAG ATCTGGGTTC 240  
 AAATGACACT TCATGCTCGA G 261

## (2) INFORMATION FOR SEQ ID NO:1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT AGTTTTTGTT TGTTTGTTTG TTTGTTTTTT GGCAAGAACA 60  
 GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAAT 120  
 GGATATAGAT CACTATTCCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180  
 ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTT TCTGAAAGAT GGGAGAAATT 240  
 TTAACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTCAG TCAATATATA 300  
 TTTCACAAAT GAATGAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG 360  
 AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

## (2) INFORMATION FOR SEQ ID NO:1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60  
 GTATAAGGGA CTCGTCCCCG AGGATAAAAC ATTGAGAGAA ATAAAAGTGA CCAGTGGGGC 120  
 CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTTA GCAGTAAACA CACCCAAAGA 180  
 TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT GCAGGCAGAA 240  
 ACAACACAGG AAAGTGTTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG 300

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360  
AGTCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60  
ACATGGTTGT TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA 120  
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTCTGCT 180  
TTGAATCCTT GATATTGCAA TGAATTCCT ACTTTATTAA ATGTATTTGA TATGCTAGTT 240  
ATTGTGTGCG ATTAAACTT TTTTGCTTT CTCCTNTTT TTGGTTGTGC GCTTCTTTT 300  
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAATGCAG 360  
ATGTACTTAG GGAGTATGTA AAATAATCAT TTAAACAAA GAAATAGATA TTTAAATTT 420  
AATACTAACT ATGGGATCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCGGCT GGAGCTGCTG GGCGCGGGAC CTGGGGCGGT 60  
TAATTTGGAG TGGCCCCTGG AGTCAGTTTCT CTACACCATC CGAGGCCCA CCCAGCACGA 120  
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180  
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240  
GAGCAACTCA CCACCAGCCT TGGGCCCA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300  
GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTAGGA GCCCTGAAA 360  
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCGG GCTATTGCAG GTGGAGACGA 420  
GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCAGCAT CGTGTGGCCC TGAGTGTTCA 480  
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTACAC TTGAAGACGC 540  
TGCCTCTGCC GCATCCGCCG CGTCTCTGC ACACGTTGCC CTGCAGGTCC ACCCCCACTG 600  
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA 660  
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCCT CTTACGGGGT 720  
TCGGCAGGAT GGGGACCCTG CTTTCCTCTA CTTGCTGTCA GTCCTCGAG 770

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

GAATTCGGCC	AAAGAGGCCT	AGTCTCTTTG	AAGATCTCTA	GGAACCTGCT	TTATGAATCT	60
TCATGCTCCT	GTGTTGGATG	CATATACATT	TAGGATAGTT	AGGTGTTCTT	TTTGAATTGA	120
AACCTTTACC	ATTATGTAAT	GCCCTTGTTT	GTCTTTTAAA	ATTTTGTGTT	GTTTAATATC	180
TGTTTGTCT	AAAATTAGAA	TTTCAGCCTC	TGCTTTTTTT	CTGTTTCCA	TTTGCTTAAT	240
AAATTTTCT	TCATTCCCTT	ATTTTAGCC	TATGGGTGTC	ATTGGATGTG	AGATTCACTCT	300
CTTGAACACT	GTACTACTGG	TTCTTGCTTT	TTTACTCAGC	TTGTCACCTCT	GTGTCTTTCA	360
ATTGGGCATT	CAAGGCTAGT	GTTGATATGT	GTGAATTTGT	TTCTGTCATC	ATGTTATTAG	420
TTGTTTATTA	TGCTGACTTG	TTTGTGTGGT	TTTNTTATAG	TGTTACTGGT	CTGTGCACCT	480
AAGTGTGTTT	TTTAGTAGC	AATATTTCT	TTTCATATGT	AGTGCTTTAT	GCGAGGTATT	540
TTGCAAGGAT	TTTCTGAATN	NTCNGAATTT	TTATGTGGGC	TAAACTAGGG	GCTCGAG	597

## (2) INFORMATION FOR SEQ ID NO:1374:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GAATTCGGCC	AAAGAGGCCT	AGCCTCCAG	TGTGAGCCAC	CGCAGCCAGC	CTGGATTGTT	60
GAATTCAATG	CTTGGGTCAC	CTCCAGATTC	ATTTTCACAG	TCTTTCATGT	TTTGGTCATA	120
TGACATTGTA	TTTGTCTGCC	ATATGACTGA	TCTTTTTTTG	TTAAATGTGA	GATACTTGTT	180
AAAAAATGTT	TAGCAATGAA	TTGAGGCCTA	GTCAGCATGT	ATCTTGTCTG	AGAAGAGATG	240
GGAGTCTACT	TCTGGGGGAT	GGTCAGGGGT	CCTCCATACA	GGCTGCAATT	GAAGTCGTGG	300
GTGAGGCTC	AGTCCCTACA	AAGGCCAGGG	TATTTCTCTG	CCACCTTTAT	TCTGATGCAT	360
GACTCTTCTG	GGTCTCAACC	AGAGCCAGTG	GACTTCAGTA	TGGGTCGCTT	TCATTGGCAG	420
ACCTCAATC	CACCTGTTTT	CCATCTAATC	CCACTCGAG			459

## (2) INFORMATION FOR SEQ ID NO:1375:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

GAATTCGGCC	AAAGAGGCCT	AATGGATCTC	ATGTGCAAGA	AAATGAAGCA	CCTGTGGTTC	60
TTCTTCCTGC	TGGTGGCGGC	TCCCAGATGG	GTCCGTGCCC	AGCTGCAGCT	GCGGGAGTCG	120
GGCCCAGGAC	TGGTGAAGCC	TTCCGAGACC	CTGTCCCTCA	CCTGCTCTGT	CTCTGGTGGC	180
TCCATCAGCA	GCAATAGTTA	CTCCTGGGGC	TGGATCCGCC	AGCCCCCAGG	GAAGGGGCTG	240
GAATGCATTG	GGAGCATCTC	TTACAGTGGG	AGCACCTACC	TCACCCCGTC	CCTCAAGAGT	300
CGAGTCACCG	TTTCCGTAGA	CCCGTCCAAG	AACCAGTTAT	CCCTGAGGCT	GAGCTCTGTG	360
ACCGCCGCAG	ACACGGCTGT	GTATTATTGT	GCGGGGGGGT	CTCCGGGCGA	TTATTCCTAT	420
GAGAATAGTG	ATTACCCCGA	CCCCCGGTAC	TATTTAGACT	CCTGGGGCCG	GGGAACCCCTG	480
GTCACCGTCT	CCTCAGCTTC	CACCAAGGGC	CCATCCGTCT	TCCCCCTCGA	G	531

## (2) INFORMATION FOR SEQ ID NO:1376:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```

GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTA CTTTACC ATTTTGT 60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTTAAGAAA AGCAAGATCT 120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT 180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT 240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTCC 300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTGTAGT 360
TTTGTAGCTA TTGGCATTTC AGTAGCATT TTTCTGCTGA TTCAAGCCTG TCCCTGGACA 420
TATTATGTAT ATGGTTTGTG GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTC 480
GTTATTCAGG ACCTTGTTGT ATCAGTGTG ACCTATCCTC TGAGCCATTT TGTTGGGTAC 540
CTGTTAGCCT TTACCCTGGG AATTGAAGTA TTAGTTCTCA GTTTTTTCTA CCGCTATATG 600
CTTACCGCTG GACTTACTGC CTTGTCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA 660
G

```

(2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 117 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```

GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAA ATGGACCCAA 60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG 117

```

(2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 118 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```

GAATTCGCGG CCGCGTCGAC CTTAAATTTA AACTGGCCT GGTTCGCTT TTTTATCAAG 60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG 118

```

(2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 229 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG	CCGCGTCGAC	ATTTTATATA	ATATTTTAAA	TAAGTTTGTG	TACAAAACAA	60
AGATTTGACT	GCATTTTGAT	TGTGACCCCG	TTGCATGAAG	TCAGGTGTGG	AGTTTTCAC	120
TTGTGGTATC	ATGTTGCTGC	TGCTCAAGAA	GTTTCTGATT	TTGGAACATT	TTGGATTTTG	180
GATTTTCACA	TTGGGGATAC	CTAATGTGAG	AGAGACTAGG	CCACTCGAG		229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG	CCGCGTCGAC	GTTGGGGACA	TGGTGGGTCT	GAGAAAAGTG	TTGCCCCGAA	60
CTTTCTATCT	GGCATTCCCT	GCGGAGGAAA	TAGAATGCGC	GCTCTCCGAC	AGCATTTCCT	120
GTAACATCCG	CGAACTCGAG					140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG	CCGCGTCGAC	TCTCAGAAGA	GGTTTGTTTA	ACTTCTATAA	ATACAACCAC	60
TTCATGCGTT	GGCATCTCCT	TGAGAAAAGG	CTTCTCGAG			99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAGTG	CTGTGGAGTA	GTATATTTCA	CTGACTGGTT	60
GGAAATGACA	GAGATGGACT	GGCCCCCAGA	TTCCTGCTGT	GTTAGAGAAT	TCCCAGGATG	120
TTCCAAACAG	GCCCACCAGG	AAGATCTCAG	TGACCTTTAT	CAAGAGGGTT	GTGGGAAGAA	180
AATGTATTCC	TTTTTGAGAG	GAACCAAACA	ACTGCAGGTG	CTGAGGTTTC	TGGGAATCTC	240
CATTGGGGTG	ACACAAATCC	TGGCCATGAT	TCTCACCATT	ACTCTGCTCT	GGGCTCTGTA	300
TTATGATAGA	AGGGAGCCTG	GGACAGACCA	AATGATGTCC	TTGAAGAATG	ACAACCTCTCA	360



GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420  
CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAGGTGT TTTCAATTTGG TGATCAGGAC TGAACAGAGA 60  
GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC 120  
CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180  
AGGCTCTCTT GTGCAGCCTC CGGGTTTCATC TTTAGCAACT ATGCCGTGAG TTGGGTCCGC 240  
CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300  
TACTACGGAG ACTCCGTGAG GGGCCGATTC ACCATCTCCA GAGACAATTC CAAGAACATG 360  
TTGTATTTGG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTATTA TTGTGCGGCA 420  
AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480  
TCCTTAGTCA GCGATCTCGA G 501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCTTTTTTTC 60  
TCTTTGCTTT CCTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCTTTC 120  
CTTTTCCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTCAATTT CTGTACAGT 180  
GTTTTGATCT TTAGTATTTT TTTTTCATTC TTCATTACAC TTTCTCTCTG CTAACATTGC 240  
CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTTGTTTT AAATTCCTAA 300  
TCTGATAATT CAACATCTCT GACATGTCTG GTTCTGGTTC TGATACTTGT TGTCAAACTG 360  
TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTT GTTTTTTGTT TTTTTTTTGG 420  
ATAGTTGGAC ATGACGTACT AGATAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480  
GTGGTAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540  
CCCATTATG CTTAGTGTTT TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTTATATCC 600  
TACTGCTAAA GGTATCACC AAGCTGTACT CGAG 634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC AAAGAGGCCT ACTCAAGTTC AAGGAAAAATG AAGACAAAAA GTGATATGAT      60
GGAAGAAAAAC ATAGATACAA GTGCCCAAGC AGTTGCTGAA ACCAAGCAAG AAGCAGTTGT      120
TGAAGAAGAC TACAATGAAA ATGCTAAAAA TGGAGAAGCC AAAATTACAG AGGCACCAGC      180
TTCTGAAAAA GAAATTGTGG AAGTAAAAGA AGAAAAATATT GAAGATGCCA CAGAAAAGGG      240
AGGAGAAAAAG AAAGAAGCAG TGGCAGCAGA AGTAAAAAAT GAAGAAGAAG ATCAGAAAAGA      300
AGATGAAGAA GATCAAAACG AAGAGAAAGG GGAAGCTGGA AAAGAAGACA AAGATGAAAA      360
AGGGGAAGAA GATGGAAAAG AGGATAAAAA TGGAAATGAG AAAGGAGAAG ATGCAAAAGA      420
GAAAGAAGAT GGAAAAAAG GTGAAGACGG AAAAGGAAAT GGAGAAGATG GAAAAGAGAA      480
AGGAGAAGAT GAAAAGAGG AAGAAGACAG AAAAGAAACA GGAGATGGAA AAGAGAATGA      540
AGATGGAAAA GAGAAGGAG ATAAAAAAGA GGGGAAAGAT GTAAAAGTCA AAGAAGATGA      600
AAAAGAGAGA GAAGATGGAA AAGAAGATGA AGGTGGAAAT GAGGAAGAAG CTGGAAAAGA      660
GAAAGAAGAT TAAAAGAAG AGGAAGAAGG AAAGCTCGAG      700

```

## (2) INFORMATION FOR SEQ ID NO:1386:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGCGG CCGCGTCGAC CTTAGTGTG TCTTTTCATT CTCTAAAAAG TGTCCTTTGC      60
AGAGAAAAAA AAAATTTTAA TTTTGATGAA ATCCAACTTA TCAATTTTTC TTCTGTGGCC      120
CCTCGAG      127

```

## (2) INFORMATION FOR SEQ ID NO:1387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGCGG CCGCGTCGAC CTCTGTTTCTGCT GAATATTTAT TAGCATTCCA      60
TCACTTTTGTG TTTAATTAAT AGAAGTTGAG TTCAAACAAT GTTTTAAAAA TTCACACAAA      120
TACTCGAG      128

```

## (2) INFORMATION FOR SEQ ID NO:1388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 816 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC AAAGAGGCCT AGTTTCTTTT GCTCTACATC TTCACCAGTA TTTGGTGTTA      60

```

TCAGTGTCT	GAATTTTGTG	CATTCTGATA	GGTGTGTAGA	GGTATCTTAT	AATTTTAATT	120
TGTGTTTCTC	TGATGCCATA	TGATGTGTGG	GACATCTTTT	CATATGCTGA	ATTGCCATCT	180
GTATATCTTT	GGTGAGGTGT	CTGTTAAGGT	TGTTGGCCAA	TTTTTTAATT	GGGTGTTTG	240
TTTTCTTGTG	GAATTTTAAG	AGTTCCTTAC	ACTGTCTCTG	TCTGTCTTGT	CTGTCTGTCT	300
GTCTGTCTGT	NGAGACAGAG	CCTCGCTCTG	TCACCCAGGT	TGCAGTACAG	TGGCACAGTC	360
TTGGCTCCCT	GCAACCTCTG	CCACCTGGGT	TCAAGTGATT	CTCCTGCGTC	AGCCTCCCGA	420
GTAGCTGGGT	TTATACCCGT	GCACCACCAC	ACCTGGCTAA	TTTTTGATAT	TTTAGTAGAC	480
ACGGGGTTTC	ACTANGTTAG	CCAGGCTGGT	CTCGACCTCC	TGACCTCAGG	TGATCCACCC	540
ACCTTGGCCT	CCCAAAGTGC	TGGGANGNGA	GCCACCACAC	CCAGCCTCCT	TACACATTTT	600
AGTTAATAGT	TCTTTATCAG	ATGTGTCTTA	TGTAAATATT	TCCTCCCTAT	CTGTGGCTTG	660
TCTTTTCATA	CTCTTGACAT	TGTCCTTTGC	AAAAGACAAC	AATTTTTAAG	AAACAAGTAG	720
ACAATTTTAA	TGAAGTCTGG	CTTATCAGTT	CTTTTCTTCA	TGGTTGGTAC	CTTTGGTGCC	780
GTATCTAAAA	GTCATCACCA	AACCAAGAA	CTCGAG			816

## (2) INFORMATION FOR SEQ ID NO:1389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

GAATTCGCGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TAGACGAAC	ATATGTTTAA	60
GCAAAAACAA	AAATAAAAT	CCTCAAAAA	AGTAATATCA	GAGTTTAAAT	TTCAACCAGC	120
TGGCACACA	ATGAAAGTGT	CAGACTTTCT	GAAAGTACTC	GAG		163

## (2) INFORMATION FOR SEQ ID NO:1390:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

GAATTCGGCC	TTCATGGCCT	AAAACCCTCA	AAAATAAATT	AGAATCCAGC	ACTGCTACAA	60
TATATTATCT	AAAATGTCTA	ATTCTCAAAA	ATATGAGTGA	TGCAAAGAAA	CAGGAAACAG	120
TGAAACACAG	AGGAAAAAAC	AGTGACTAGA	AACTGACTTA	AGAGTAAGCC	CAGATGTATT	180
TGGGAGCCAG	AGCCTTCAAA	GTAGCTATTA	AATATGTTTC	AAAAAATTAA	GGGAAATAT	240
GACAATGACT	CAAAAATAAG	GACTCTAAAT	ATAGAAATGG	GAGCTG		286

## (2) INFORMATION FOR SEQ ID NO:1391:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT ACTTTTAAGG GCTTGAAGT TTCAAAACCA CAGTCTGCAT      60
GTGACAGGTG CTCACTGCTG TTGGGTTGGC CGCTGGTTCT AGGCCTCTGC TGGAGTGTGT      120
GATCTGCTTT CTGACGGCAG GGCCTTCACA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC      180
TCTTTTTCCT CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGAATATCG      240
CATAATGTCT CATCTGTTT ATCTCTTGCT ACAAACATCA CAATCTCAAA ATAACAATGG      300
CAGTACAACCT GCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTTT GCCTAAGTCT      360
TCCCATCTCG TGTAGTTATG CAGAGTCTCG AG                                     392

```

## (2) INFORMATION FOR SEQ ID NO:1392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAAACTAACA      60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGGTGATT CAGAATCCAG GCCTGGTGTT      120
CCTTCCACAG TACCAAGCG CCACACATTA GTTGTCTGT AGATTTTCCA CACTTCAGGG      180
AGAATGCCAA AGTATCTTTG CCTTGACAC ACTACCTGTT CAACACTCAG TGACGAGGGT      240
GTCGTGTGTG CTCAGGCAAC TCCCGCCCTT CTCCTTTTG CTCGAG                     286

```

## (2) INFORMATION FOR SEQ ID NO:1393:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTCT CAAATCTAAC GTTTTAGGAA TTTTTATTC      60
CTGCAGAGAG TTGGGAGCT GTTTAAAGT TGGTTGGTTT AGCCAGTATA GCTAGATTCC      120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTTCTCAT GATAGTCTAA      180
ACTGTGTGAT GGCCAAGTCC CCACTTTGAA GATGTCCAA TTGAGCCTCA GACATTTCTC      240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCCTTT CCCAAATTAT TTGCTCATGT      300
CGCAAGACTG AGGTCTCGAG                                     320

```

## (2) INFORMATION FOR SEQ ID NO:1394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTTGG      60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTTT GTGAACAGCC      120

```

```

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACCTGT      180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT      240
CCCCTGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGGG TGGCCAGAGT TACCTGCTGC      300
TGATCCGAGA TGAAGGAGGC CCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCAGTGG      360
TGTTTGTTT CAGCCTGGAG GATGAAATCA GTTCCAGAC GGTGTACAAC TACTTCCTGC      420
GTCTCTGCAG CTTCGCAAC ACCCCTCGAG      450

```

## (2) INFORMATION FOR SEQ ID NO:1395:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGA CCATCAAACC CCAGACAATC      60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC      120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG      180
ACTACCAAGC CAAAACCTT CAAAACAAG GACCATGGTA TGTCAAGGAA GGGTGCTTCC      240
TTCTTCCTCA CTCTCAAACA ATCTCTATCC TTCGAG      276

```

## (2) INFORMATION FOR SEQ ID NO:1396:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA      60
ACTCTTTGAA AACTAAATAG TTAAAATCT CATCCAACCT CCACCTAACT TACATGCCTG      120
GTTAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA      180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA      240
G      241

```

## (2) INFORMATION FOR SEQ ID NO:1397:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT      60
TGATGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT      120
GGACCCCTTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA      180
TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG      240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCGGT TGTTTCTTAG CTTGGGAGAC 300  
 CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGCACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60  
 TGAAGACACC TTTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120  
 AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTCAGGGTT 180  
 GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAACTT 240  
 ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300  
 AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 614 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60  
 AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120  
 AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTTATGTA 180  
 GAGAAGGGGT TTCGTCAATG TGTCAGGCTG GTCTCTCACT CCTGAACTCA GGTGATCCGC 240  
 CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300  
 CTTGAGTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360  
 GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420  
 AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480  
 TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540  
 ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600  
 ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

TTATTAACCT ATCACAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTTTAAAA	120
TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATTCCAAG	180
TACTGTGGTT CTA CTGTTTA GTGAAAACCT CTGGAAGTTA AAATATAGAA TATGAAACCT	240
CGAG	244

## (2) INFORMATION FOR SEQ ID NO:1401:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA	60
AAGAAGCCAC AGAAATGTTT AAAAATTCTA TCGACTTAGC CTGAGTCATA ACGGTTAAGA	120
AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTCACAT GAGGAAGTAG CTGTCAGATG	180
TCACATAATT ACTTTCGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAA	240
TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC	300
CTTGGATTAA AACGGGAAAC TCGAG	325

## (2) INFORMATION FOR SEQ ID NO:1402:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 364 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGTT ATTTCTCTGT TAGTGACATG	60
TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG	120
TTCCTTTAGC CTA CTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT	180
GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT	240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA	300
TCTTCAAGGA ATGTCAATAA ACCCACTTGT GCTAGGCAGG ATTGAATTCT AGACCTGCCT	360
CGAG	364

## (2) INFORMATION FOR SEQ ID NO:1403:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTGT ATCAACAGTT GATAAATGTC	60
TAAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG	120
GAAGTTAGTC TAAAAATTAT CGTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT	180

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240  
TGAATTCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTTGC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60  
 TGTCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTTAT 120  
 CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180  
 CTTCTCTTCC CTGTGCATAT TTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGCAT 240  
 TAATTCTGTT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCTG TGTCCTTCCA 300  
 CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCCTTGTA 360  
 TTTTCTCAC TCCTCTCCAC ACACCCCGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 444 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCCAG ATAAAGGATA CATTGTGCAT 60  
 ACATACACTG GGGAGAGGCA GACAAAAAA CAATGTAGTT TGAGTGTGTG TGCGTGCTTG 120  
 CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAAC ATGATAAGTA CTATTAAAAA 180  
 AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240  
 AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300  
 GTTGTGGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360  
 ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420  
 AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 363 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60  
 GCCTGAAGTT TGCAGTGCAA TGCAGTAAGT ATTTACCGAG TGATTTCATAT GAGTAAGGAT 120  
 GTGATAGCTG CTATAAGAGC TGCAAAGTTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180



```

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTCG TTTTGAAGA TACCTTTCCC      240
CCAGTTATTT TCATTTTACA GCTTCTCCAG CCTCCTTCAG CTTCTGTTCT CCCTCTTTGC      300
TTTCTGTCT CAATTTTCCT GCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC      360
GAG                                                                    363

```

## (2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

```

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC      60
CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA      120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCCATCG CAAGACAGTT      180
TCACTGTATT TAAGCGAGAT CTGCCCTCG TACACGATCA CCGCTCGAG                    229

```

## (2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 512 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

```

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAGAATG TAGGCAGGCT CCCAAATGGA      60
GAGGTAAACA TGACCGCGTT GTTTGAACT ACTTCATTAA TTTGTAAATC AGAACCAGAA      120
AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCCTCCTCCC CACTTACGGA TAAACAGACT      180
TTAACTTCCC TAACCCAGAA ACACTTCAC CAAAAATGTA TGGTTATACC TTATCCTAAA      240
AAGGCACCAT GCAGGCATT AAGACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA      300
ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAAA CCCCAGAGG ACTGGTGACA      360
TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCCAGCGG GAGCTTCAGC      420
TCTGGTCAGG TGCACGGCTG CCAAAGCTG CACACCTGG GGACAAGGAA AGGAGACACT      480
TGCTTCATTG TGCTATTCAT GACCCAGTCG AG                                512

```

## (2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

```

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT      60
TTATCTCTTT CATTGTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTCATCT      120
AAATTGAAAG ATTCAGGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTTAATGTC      180

```

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAATTGT GTCTTCTCTC 240  
TTTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60  
GGCCCTGGAT GCTAAGGCTG CAGTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120  
CAGCCTCCAA GACACAGTGT GCTGACCTGG TTTGTATAA AGATGAAAAC AGCTGTTCTC 180  
AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240  
CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTCAGGAAA 300  
AATAGAAGCA CGAATTCACC CCTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360  
ATTGCATAAC TGTTAAGAAA AAGCAAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCCTG 420  
GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60  
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATTC AACTCATATA TGTCTCCAAA 120  
TTTATATATT AATTCATATA CTGTTTGTG TACATTAAAT CTAGCATGTG CTTTGGCTT 180  
GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240  
TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTGCCT CTTAAGTTT GCCATCCCA 300  
AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAGT 360  
GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420  
AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTTGTC TAGGTGAGTG CTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60  
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTG 120

AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAAGGCGT TTAAATGTGG CTTTTTAATG	180
AGCTGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG	240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TTAACAAAAA	300
ATGTTTTTAA AGATAAGGAA CAGACTTAAA GTGATGATTG ATTGCTCATA GAACGTTTAT	360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT	420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCCTCA	480
GAGAGTAGCA GCTCGAG	497

## (2) INFORMATION FOR SEQ ID NO:1413:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA	60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACAACT	120
AATTGTATTT TTCCCTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCCTATAT	180
TACTGTAAC TCAAGAAAGA CTACTAACAA TACTGGCTAT CATTATATTA TATTAAGTAG	240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTAGTCT TCGTGTGTAC	300
TACCGTTATC TTCACCTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG	360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAATTCCCAT GGACTAAGCT TGGAGAAGTA	420
AGAACTATTA CTACTCGAG	439

## (2) INFORMATION FOR SEQ ID NO:1414:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTTAGC TCCTGTCTAA	60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTTCTT TATTAATTCC TCAAGTACAG	120
ACTTTTGTAT GTAACCAAGT TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA	180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC	240
GAG	243

## (2) INFORMATION FOR SEQ ID NO:1415:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

```

GAATTCGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTTT TTTTGTTTT 60
CTGTATCAGT AATTTCATTCT GTATATTTTA AAAAGTTTAA ACCTCTTCTT CCTAGCCCTC 120
CAGTATTTGT TTATAAATTA AAACGTTTCC CAAAGTGTTT TCTGTGAAAC AATAGTTCTA 180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAAATCCA AAGTATATGT TTTATTCATT 240
ACATTTGATG AATTTTTTTT GTTTTTCTCT CTCGAG 276

```

## (2) INFORMATION FOR SEQ ID NO:1416:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

```

GAATTCGGCC TTCATGGCCT AGAGAGCAGG TTTAGCTTG CATCCAGCTG TTTCTTGAGT 60
GATGTGTACA GCTTACCCCC AAAGAGGCAA CTGAATTCA GCTGCTCTAA TACCCACACC 120
CTCAACTTAG GTTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC 180
ACAAACCTCA CCTTCTGTGT GGCAGAGATG TGCTTTAGTT CTTTATTGGA ATGTTACTTT 240
CAGATCTCAC AAACCTCAAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAATAGAT 300
AAATCCTTTG CCAGGTCTTC AAGCTTTCCA CTCCCCTCGA G 341

```

## (2) INFORMATION FOR SEQ ID NO:1417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

```

GAATTCGGCC AAAGAGGCCT AGCCATTATT ATTAAAAAGT AGGATTGCTA CCCGCCATTA 60
CTATTAAAAA GTAGGATTGC TACCCGCCAT TATTATTAAG AAGTAGGATT GGTACCCGCC 120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC 180
CTCCATTATT ATTAAAAAGT AGGATTGCTA CCCTCCATTA TTATTAAAAA GTAGGATTGC 240
TACCTGCCAT TATTATTAAG AAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA 300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTAAAAAGT 360
AGGATTGCTA CCCGCCATTA TTATTAAAAA GTAGGACTGC TACCCGCCGT TATTGCACA 420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG 455

```

## (2) INFORMATION FOR SEQ ID NO:1418:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

```

GAATACCTAG CTTCCATGAT TTATGATAGA TATCCTTTAT TGGACCAATT CGTGTCTGTA 60

```

```

ACCAGCCTCC TGTCTTCTACT GCCATCCCCT CCTCATGCAC AGATGCCTCC TCCCTTGGCT    120
CCTGCTCTGA TCCCTGTACC CAGCTTGTC CCTGCAAGCA TGTTCCTCCTC CCTTGCCCAG    180
GCTCTGACAC CCCACACATG TGTGGATCCC CTCCCCTGTC CCAGCTCTGA TACCCCTTGC    240
ATGTGTGGCT GCCCTCACC TGGGTGTCTT CTTCCTGTC CCAGCTCTGA CACCCACGCA    300
TGTGGGGCTG CCCCCTGCCT AGGTGTCCCC TCCTCTGTC AGGCTCTGTC CTCCTGCGGT    360
TGGCTTTCCC ATTCTGGATG CACCTCACAC ACAGCCTTGT CATCTTTGGA TGAATTTGGC    420
CTCCCCATC CACTGCTGGT GCAGATGCTT CCTTACGGGG CCTGTCTGA TGGCTTTAGG    480
GCTGAATCAT GCAGGAAGGA AGGAGAAGGA CAAGAAGAAA AGGGAAGGCT GGGGAAGGAA    540
GCGGGTGGTA AAATTGGTTC ACAAGCCCTC GAG                                     573

```

## (2) INFORMATION FOR SEQ ID NO:1419:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC AAAGAGGCCT ATTTTAAAAA AAATAATTTA ATTTTAAAT TTATTTTGG    60
TTGTTTTTGG CACAATGAAG TTTCAGCTTC TCAACCTTCT CCCCTACCA GGGCTGTGGA    120
CCCAGACTGG CCTTGAGCCA CAGTCCCTCT TTCCCTCCTC ACCCTCTTCC CCCTCCGGGC    180
ACCTCGAG                                     188

```

## (2) INFORMATION FOR SEQ ID NO:1420:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 572 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC    60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCCACAGAA AAGAAGGACC    120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTACAA TGATGCTCAG AGTTTGTATT    180
ATGACCATGA TGCCTTCTTG GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG    240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGATGGCGAC AAGGACGGGT    300
TTGTCACTGT GGATGAGCTC AAAGACTGGA TTAAATTTGC ACAAAGCGC TGGATTTACG    360
AGGATGTAGA GCGACAGTGG AAGGGGCATG ACCTCAATGA GGACGGCCTC GTTTCCTGGG    420
AGGAGTATAA AAATGCCACC TACGGCTACG TTTTAGATGA TCCAGATCCT GATGATGGAT    480
TTAACTATAA ACAGATGATG GTTAGAGATG AGCGGAGGTT TAAATGGCA GACAAGGATG    540
GAGACCTCAT TGCCACCAAG GAGGGTCTCG AG                                     572

```

## (2) INFORMATION FOR SEQ ID NO:1421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 498 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

```

GCAAGACGGC TACTGAGGCA GGAGAATCGC TTGAACCCAG GAAGCGGAGG TTGCAATGTG      60
CCAAGATCGT GCCACTGCAC ACTCTAGCCT GGGCAACAGA GCAAGACTGT GTCTCAAAAA      120
AAAAAATCT TNGACNAAAC ATAGTTGTTN ACATACTTCT TTAATCCCAG AGTTAGTTTT      180
AAAAANNACA TGATTGCTGT TTTTGCATAT TATCTCAGCG GTCTAAAATT AACCTAGCCA      240
TGTGCAGGAA TGGGTAAAGT CCCCTTAAAC AAAAATGGGG TTAGTTANGT TAGTTCTTTT      300
GCCATTTTAC TGGTCATATA CCTGAAGCGC TTAGCCTGAC ACAATTGAAC GCCAGACGGA      360
AGCCCGNATC AGCGGTCTTG ACGGGGGTCA GAGTCAGACC AGGGGTCTTT TACCCAAGTG      420
GGGAAGATTG GGAAAGGCCT AGGATCAGAG AGGGAAATGG GTCCCTGGTT GCCCATGGAC      480
CTAATGGGGT CTCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

```

GAATTCGCGG CCGCGTCGAC GAGGAAACCA GCCAAGGACT AACTACGACC ATGAGATTGG      60
CAGTGATTTG CTTTTCGCTG TTTGGCATTG CCTCCTCCCT CCCGGTGAAA GTGACTGATT      120
CTGGCAGCTC AGAGGAGAAG CTTTACAGCC TGCACCCAGA TCCTATAGCC ACATGGCTGG      180
TGCCCTGACCC ATCTCAGAAG CAGAATCTCC TTGCGCCACA GAATGCTGTG TCCTCTGAAG      240
AAAAGGATGA CTTTAAGCAA GAAACTCTTC CAAGCAATTC CAATGAAAGC CATGACCACA      300
TGGACGACGA TGATGACGAT GATGATGACG ATGGAGACCA TGCAGAGAGC GAGGATTCTG      360
TGGACTCGGA TGAATCTGAC GAATCTCACC ATTCCGATGA GTCTGATGAG ACCGTCAGTG      420
CTAGTACACA AGCAGACACT TTCACTCCAA TCGTCCCTAC AGTCGATGTC CCCAACGGCC      480
GAGGTGATAG CTTGGCTTAT GGACTGAGGT CAAAGTCTAG GAGTTTCCAG GTTCTGATG      540
AACAGTATCC TGATGCCACA GATGAGGACC TCACCTCTCA CATGAAGAGC GGTGAGTCTA      600
AGGAGTCCCT CGATGTCATC CCTGTGCCC AGCTTCTGAG CATGCCCTCT GATCAGGACA      660
ACAACGGAAA GGGCAGCCAT GAGTCAAGTC AGCTGGATGA ACCAAGTCTG GAAACACACA      720
GACTTGAGCA TTCCAAAGAG AGCCAGGAGA GTGCCGATCA GTCGGATGTG ATCGATAGTC      780
AAGCAAGTTC CAAAGCCAGC CTGGAACATC AGAGCCACGG CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

```

GAATTCGCGG CCGCGTCGAC GGGAGAGGAA GGGTTGGGCA GGATGGAATA TTAAATTGTA      60
ACATGATAAA CATGCAAGAC TGTTATCCAA TCTAGATAAT TTATATACAT TTTGATGACT      120
TAGGAAAACA AAGCAATCAT TTGTGACAAG CCTAAAAAGC TTGACATATT TAACATACTT      180
AGGAACTTTT TTTGTGCGGT GGGAAATTCTC TAATTGTATC ATGTGGGCCT TTTGAAAGTA      240
ACAAACAGAA GGCCAGTCTG TTGCAAGTTT GCTGCTGAAC ATCAGATTCC ACCCTAAGAA      300
AACACAAGGT GGATTGCATC GAGGGTGGAT ACCTTACCTT AGCACAGA

```

## (2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 152 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC	60
TTTACTACTGG CTTGTTTACT TATTTCTTCA CCAAAGCCAG GGAACGTCCC TTTAGCTACT	120
GCAGCATTTT TAACAGATGC GACAAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 206 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC	60
ACTTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCGAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCCTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTCTT CTTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CTTTCTTCCC TTTCTTCACC ACTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 343 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTTGG	TTATCTTGAC	TTTTTAAAT	AACATATTTT	60
TACAGGATTT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTTGTGCAC	120
ATTATTATGG	AGCATCATTA	ATGGTTTGTA	CATTCTTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAATT	TGGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCCTTG	CTTTCCCACT	GCTGAAGACC	TCTCCTTACA	GAGTGTTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGGTCTCTC	GAG		343

## (2) INFORMATION FOR SEQ ID NO:1428:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAAGCA	TGCAAGTGCG	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCTGTGGACT	GCAAACAAGG	CCCGGCTCAA	CAGTCAAGGC	TTTGGGTGTG	360
CCTGGCTCTC	CAAGTTCCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTC	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

## (2) INFORMATION FOR SEQ ID NO:1429:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TTCTCCCAAC	CCGGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACTGATTAA	CATAATAGAT	420
GGTGTTTTGA	GAGATGATGA	CAAGAACAAT	GATGGCATA	TCGAG		465

## (2) INFORMATION FOR SEQ ID NO:1430:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double



(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

```
GAATTCGCGG CCGCGTCGAC GCTGTTTCATG AGGAGACTTA ACCACAATTC AAAGTGTAGC      60
AGTTGTGTAT TTTAGCATTG TAATATTTGA TTGAGGCCCT GAGGTGTTAA TATCTCAATC      120
TCAGAGTTAG ATGTTTCATGT CCTTTTGTAA TTTTAAAC ATTTTTCATA ATTTTTCATC      180
TAAGTTAGGG AGCACATTGA GTGAAGTCT CTGTGTAGAA CAATACCTTC TGCTCTGCTT      240
CTCCAGCTT TCACTGAGGG CTGGAAAAGG ACAGGCCTGT CCAGCTGTAC TGCCCACTG      300
TGTATGGGGA AGCTCAGGCT CTGGTGAAG CAGGGGGCAT GGATGTCAA CAACTGATGT      360
GCAAACTC GAG                                     373
```

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

```
GAATTCGGCC TTCATGGCCT ACTACTGATG AGAACATTAT CTGCATATGC CAAAAAATTT      60
TAAGCAAATG AAAGCTACCA ATTTAAAGTT ACGGAATCTA CCATTTTAAA GTTAATTGCT      120
TGTCAGCTA TAACCACAAA AATAATGAAT TGATGAGAAA TACAATGAAG AGGCAATGTC      180
CATCTCAAAA TACTGCTTTT ACAAAGCAG AATAAAAGCG AAAAGAAATG AAAATGTTAC      240
ACTACATTAA TCCTGGAATA AAAGAAGCCG AAATAAATGA GAGATGAGTT GGGATCAAGT      300
GGATTGAGGA GGCTGTGCTG TGTGCCAATG TTTGTTTGC CTCAGACAGG TATCTCTTCG      360
TTATCAGAAG AGTTGCTTCA TTTTCTCTGG GAGCAGAAAA CAGCAGGCAG CTGTTAACAG      420
ATAAGTTTAA CTTGCATCTG CAGTATTGCA TGTTAGGGAT AAGTGCTTAT TTTTAAGAGC      480
TGTGGAGTTC TTAAATATCA ACCATGGCAC TTTCTCCTGA CCCCTTCCCT AGGGGATTTT      540
AGGATTGAGA AATTTTCCA TCGAGCCTTT TTAAATTGT AGGACTTGTT CCTGTGGGCT      600
TCAGTGATGG GATAGTACAC TTTTCACTCG AG                                     632
```

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

```
GAATTCGGCC TTCATGGCCT ACTAATTTC AAGAGCTAAA CTTTATACCG CCTGCAATAT      60
TTCCATTAC TACCAGTTTT TTTCTGACCT AGTCAGATAT AAGAAGCCCC CTTACTGGAT      120
ACAAGACAGT TAATTATCAG ATCCAGTCTG ATCCTAGATC CAGTCTGATC CTAGACCCAG      180
TCCAGTTTCT GTTGTGACTT CCAAACCCAG TTTGGATCAG AAATTGCTC AAAGAACTA      240
GGAGAGCTCA AAACACAAAT ATGTGGAGCT TCTGAATCTG AGAGAGAACG AACTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

```

GCGTGGTTTC ACCTTGTTGG CCAGGCTAGT CTTGAACTCC TGACCTCAGG TGATCCACCC      60
ACCTCGGCCT TCCAAAGTGC TGGGATTACA GGCATGAGCC ACCGCATCTG ACTGGTGCAC      120
TTTACTTTGA CCTGTCATAA ATCCCTTGGT TTGTTATTAC TAGTTTTTAC TTTAGACAGC      180
AATTATCTTT CAAGGAAAAA TTTAAAAGGA AAAAATGTCT TATATTTACC CTCATGTTTA      240
CCATTCCCAG TGCTCTTTAT TTCTTTATGT CAATCCGGAT TTCAATTGT TATCATACTG      300
TTTCTGCCTG AATAACAGTT TAACAGCAAC TCGAG                                335

```

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

```

GAATTCGGCC TTCATGGCCT AATGCTCTGT GTCACGTCTC CCCGGTGCTC AGCACAGACA      60
AGTTCAAGAC AGATTTTTAT GATCAATGCA ACGACGTGGG GTCATGGCC TACCTCGGCA      120
CCATCACCAA AACGTGCAAC ACCATGAACC AGTTTGTA CAAGTTCAAT GTCCTCTACG      180
ACCGACAAGG CATCGGCAGG AGAATGCGCG GGCTCTTTT CTGATGAGGG TACTTGAAGG      240
CCTGATGGAC AGGGGTGAGG CAACTATCCC AAAGGGGAGG GCACTACACT TCCTTGAGAG      300
AAACCACTGT CTCGAG                                316

```

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```

GAATTCTAGA CCTCCACCC TGTAGAACAT TCTCTCACT TAGGAGATAG TCATATTTTC      60
AGGCTGCCTT TGAACTGTG GGTACACAAA CAGCAGAGCG ATCTATTCA GCAGTTGAAG      120
TTGTATTTGA GCCATTATT CTTCCACTCT CTTTTGGTT GAGTTTCTAG GAAGGAAAGG      180
GCTGAACTCC ATGACTGCTC ATATTACAGT GCTAAGTCCT CACAGCCATC CACTGTTTAT      240
ACACAAGAAG AAACTAGGCC CACCAAGAGT AAGCGCCTGC CTGAGGTCCG TGAGTGAGTA      300
AGGGCCAAAG GTGAGGTTGG GATCTGGCCC TTTCTCTTT CTGGCCACCA CAGGGCACTA      360
CCTCCCATAC CCACACTC GAG                                383

```

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC	TAAGGTCCAC	AACGTCGACA	ATTGAAAGCT	TTGCTGCACA	AGAAAAACAA	60
ATGGAAGTTT	GTGAAGTATG	TGGAGCCTTT	TTAATAGTAG	GAGATGCCCA	GTCCCGGGTA	120
GATGACCATT	TGATGGGAAA	ACAACACATG	GGCTATGCCA	AAATTAAAGC	TACTGTAGAA	180
GAATTAAAAG	AAAAGTTAAG	GAAAAGAACC	GAAGAACCTG	ATCGTGATGA	GCGTCTAAAA	240
AAGGAGAAGC	AAGAAAGAGA	AGAAAGAGAA	AAAGAACGGG	AGAGAGAAAG	GAAAGAATC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 228 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC	TTCATGGCCT	AGACTTTTAC	ACATTTTAT	TAGCTACCTG	GAATTATTTT	60
TGTAACACGT	TAAGTGTAAG	TAAACAAATA	ATGCTTTGCT	TTTTGTTTTT	TGGAATTATT	120
GTGTATTTC	TTTGCCAAAT	GCATATATCT	TCAGGTCTTT	TTTTTATAAC	CATATGCATA	180
CCAAGGCACC	ATTCCATTGA	CTTCCAAC	TCTGTCCCA	CCCTCGAG		228

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA	GTCCCCACCC	AGAAACCCGC	AGCATGATTG	TCTGCCTCCT	TTTCATGATG	60
ATTTTATTGG	CAAAGGAAGT	TCAACTGGTA	GACCAAACAG	ATTCACCTTT	ACTTAGTCTC	120
CTTGGACAGA	CAAGCTCACT	TTCATGGCAT	CTTGTGGATA	TTGTGTCGTA	CCAGAGTGTG	180
CTAAGTTATT	TCAGCAGCCA	TTACCCGCCG	TCCATCATCC	TGGCAAAAGA	ATCTTATGCT	240
GAATTAATCA	TGAAGCTCCT	AAAAGTGTCT	GCGGGCCTTT	CTATTCTTAC	TGACAGCCAG	300
AAGCATCTTG	ATGCAGTTCC	AAAATGCCAA	GCTTTTACTC	ATCAGATGGT	TCAATTCTCT	360
AGCACCTTGG	AACAAAATGG	AAAATCACC	TTAGCAGTCC	TAGAACAGGA	AATGTCTAAG	420
CTCTTAGACG	ATATCATTGT	CTTTAACCCG	CCCGACATGG	ACAGCCAGAC	CGCCCATG	480
GCCCTCAGCG	GTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 314 base pairs  
 (B) TYPE: nucleic acid

- (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```
GAATTCGGCC TTCATGGCCT AGCAGGGAGA GGGGTTCTGT GCTCCTGAGA TTAGTTCAGA    60
TGGTCTAACC ATTGTTCTAT ATGTGCATTT TAGTTAATAT TGTGTATTAA AGGATAAGTC    120
TTAATGCTCA AAGTATGTTA AAAATAGATG TAGTAAATCA GTCCCTTTGT GAATGTCCTT    180
TTGTTAGTTT TTAGGAAGGC CTGTCTCTG GGAGTGACCT TTATTAGTCC ACCCCTTGGA    240
GCTAGACATC CTGTACTTAG TCACGGGGAT GGTGGAAGAG GGAGAAGAGG AAGGGTGAAG    300
GGAAGTGGCT CGAG                                     314
```

(2) INFORMATION FOR SEQ ID NO:1440:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 424 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```
CCAGCCGTCT GCAGTCCGG CCGCCACTTG CGCCTCTCCA GCCTCCGAG GCCCAACCGC    60
CGCCAGCACC ATGGCCAGCA CCATTTCGCG CTACAAGGAG AAGATGAAGG AGCTGTCCGT    120
GCTGTCGCTC ATCTGCTCCT GCTTCTACAC ACAGCCGCAC CCCAATACCG TCTACCAGTA    180
CGGGACATG GAGGTGAAGC AGCTGGACAA GCGGGCCTCA GGCCAGAGCT TCGAGGTCAT    240
CCTCAAGTCC CCTTCTGACC TGTCCCAGA GAGCCCTATG CTCTCCTCCC CACCCAAGAA    300
GAAGGACACC TCCCTGGAGG AGCTGCAAAA GCGGCTGGAG GCAGCCGAGG AGCGGAGGAA    360
GACGCAGGAG GCGCAGGTGC TGAAGCAGCT GGCGGAGCGG CGCGAGCACG AGCGCGGGCT    420
CGAG                                     424
```

(2) INFORMATION FOR SEQ ID NO:1441:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```
GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGTCAGGCTT    60
AAGTTTAATA AATAGCAAAT TGCATACAGA TATTTACAAT GATCGAAAGA CAAACAGAGG    120
TCCTATCCGT GCAGTCCCAA CAATAAGAC AGGCATTGGC ATAAAGTJTT TATAAATTCT    180
TGGGTACAGC TGTCTGAAA GTAAAGTTCA CTTTCAATCC TAAAAAAGT CCGCTATTCC    240
TCCCTGGCTG CTCTGGACTG TCCTCATCCT CTTTAGCTGC TGTGCGCCT TCCGCCACCG    300
ACGAGCTAAA CTCAGGCTGC AACAAACGCA GCGGCAGCAT CTCGAG                                     346
```

(2) INFORMATION FOR SEQ ID NO:1442:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 591 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC	TTCATGGCCT	AGGCTTCCCT	GTTCCCTCAG	CCCCAGTCGA	GAGGAAAGAG	60
AATCGGGCCA	CTGCCAGAAA	GAGAGTCAAG	CAAACCTGGA	AGGGCAAATC	TGAGAGTGGG	120
AAGGCCAAAG	GCCGAGGCC	AGATTTAGTA	TTCACCTAGCA	GCGCCTTCGG	GTAGCAGGAT	180
GATTCCTTTT	CCTGCCTGTC	TGCTGCTGGC	TCTCTTCCCT	AAGGTACAGG	TTGGCAGGAC	240
CACCTCCGCC	TACTTCTCCA	CCATCCCTAG	CATGCCAGCC	CGTTCCCAGA	TCAACCTGCC	300
AGTGGAGTCA	GGCAGTGAC	TCCTGGAGCC	AAGAGGGAAG	GGCAGGGTAG	AGAGGGTATG	360
TCCAGTAGCC	TGGAGCTCCA	TGGTGGCTTC	ATGCCTCCCT	TCTCCCAGCT	CAGGTGGCCC	420
TGAGGGCTCC	CTCGGAACAG	TGCCTCAAAT	CCTGACCCAA	GGGCCAGCAT	GGGGAAGAGA	480
TGGTTGCAGG	CAAAATGCAC	TTTATAGAGA	TTTTCTATTG	CTGGGAAGGT	GTGTTTCTCC	540
CACAATTGT	TTGTGAATAT	TCACTTGT	TATAAATGTC	TGACCTGTCC	G	591

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	ACCTGCCTCG	AGCTCCTGTC	CTTAGGTGAT	60
CTGCCCGCCT	TGGCCTCCCA	AAGTGCTGGG	ATTATAGGAG	TGAGCCACCT	GGCCCAGCTA	120
GCTTTTAAAG	TTCTGCCAGC	ATAGCCCCTG	GATGGGGTGG	GGGTAGACAG	GGCCTTAGGA	180
CTTTTCATTT	TAAATGCTC	ACTCCACAGT	GAAGAAACAG	GTGATGACTA	TCCTGAATAT	240
TTGGGAAGCT	GTGTCTAGA	ATTTTGGCC	TCAGTTCCAG	AACCCACAGC	TTCTTTACAA	300
CATGCTTCAA	GCCTGGGACT	GAGCTGCCAG	TAAATAAAC	CCTAGTAACC	TTAATATGGG	360
TTAATAAGAT	TAGGTGCCCG	CTCTGCACGC	TCCCCTGCCC	CTCCTCGTCC	GGGCACCTGT	420
TATGCTAGGC	CAGCATGTTT	GCAGCTTAGC	CAGGGAAAAT	CGTGGACCAA	GACAGGGCTT	480
TTCATCCACG	ACTGGCTAAA	AAGATGGCTC	TCAATAATAT	CTCGAG		526

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GATTGAATTC	TAGACCTACC	TCTCTTTTTT	TGTGGTCTCT	CCTTCATTCT	CTGTTTATTT	60
CTCCGTGAGA	TTTCTGATT	AGTAGTTACC	TTCAGCATGC	CAGTTGACTT	GCAAACCTAC	120
AATCCAACT	TTCTTCTACT	TGTCTATCTG	ACAACAGCCT	GGTTTGATAG	TGATTCCAGG	180
ACTTCTTAC	TTGGGTGGCC	ACTCTCATT	CCACAGAGTT	CACCTAGTCAT	GGTGAACACA	240
CCAGTCTTTT	ACACCTCCCT	CACTCCCAAA	CACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1445:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```

GAATTCGGTC TTCATGGCCT AGGGGAAGAA AGGCACCTTT CTCACAGGCT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAAG CCCTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGGCTC     120
ACGCGTGTA TCCAGCACT TTGGGAGGCC GAGGCGGGTG GATCGCGGGG TCGGGGGTTT      180
GAGGCCGGCC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATTGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCAGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTACTGCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCCTCT      420
GAATACTGTG GTTGTATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAAATAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAATTTGAT TACCCTAAAT      540
ATATCATTAG GATATTATGT TATTACATC TCTTATGCTA ATTCTAATT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TTGNNAATGG AATTGGTCCT CGAG                          644

```

## (2) INFORMATION FOR SEQ ID NO:1446:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```

GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT     120
TGCTCGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCCG CGTCCCCCAA CTTCTTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGGCA GGCGCGGGTA ACCCGTTGAA CCCCATTCGT      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCACAGT AAGTGCGGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCTT TCCATCTTTT CCCCACACT CCCTTTGACC      540
CTGTGTTGCC CTCAGAGGCC AAATTCTTGG GCTCAGGGAC TGGCTTTCGG CCTATTGGTG      600
GTGGAGCTGG GGTCTTGCA AGGAATTCA GGCAGCGCTT GGAGGCAATG TTCCCCGAGA      660
GCAGTTCACG GTGGTGATGT TGAATTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGAAC CTCGAG                          756

```

## (2) INFORMATION FOR SEQ ID NO:1447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GAATTCGGCC	TTCATGGCCT	ACCTGCCTCG	AGGTCCTGG	GATCATCTGA	ACAGAAGTGC	60
ACAGGCTACT	TGTACAGAGA	AAAAATTAAT	ACTCAAAGGA	AATCTTCATT	TTTTAGATTG	120
ACTTTGGGAA	TTTGAATTTT	CATCAGTGCA	AATATAAATT	TCTCTATCCT	GCTCTGAGGC	180
TAATTGGTAC	CATATTTTCC	CTTGTGTCT	TGTGACTCTG	CCACATCCCA	TCTCATCCTG	240
GCCTCTGAGT	CAAGAACCCA	GTGAACTGAC	TTTCTAGTTC	TAGAAGTTCC	GCTGCAAGGC	300
CAGGAAAGCT	TGAGAAAGGT	ATTGTGGAAG	AAGCAAAGGT	AGACCCCAT	TCACTCGAG	359

## (2) INFORMATION FOR SEQ ID NO:1448:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCGGCC	TTCATGGCCT	AGGGAAAATA	AGTTAATTCT	AAATCAAATC	TAAATATTAT	60
ACCTCATGCT	ATGGTTTTAT	TTTATTTTCAG	TGCTGCCGTT	ACTTTTCCTC	CCCAAAGCAA	120
TGTGTTTTCC	AGCCACAACC	CTCGAG				146

## (2) INFORMATION FOR SEQ ID NO:1449:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GAATTCGGCC	TTCATGGCCT	ACTTTTCAAA	AGCAGCTTTG	CTCTACTGAT	TTGGGTAAAA	60
GCTTAGTTGC	AGTTGGNTTG	GGAGGAAATG	GGAGCAGAAA	ATTTGAGAGA	GTGAGTGTAG	120
ACAACTCTTT	CAAGGAATTT	CGCTATAAAT	GGGAGTAGAG	ATCTGAAGAC	TGAATAATTA	180
GCAAAGTAA	AAGTGGGAAG	ACGTAATTCT	CTTATTATTT	CATTTTCTT	AGTGAAATAA	240
GAGGTGAAGT	TCTCTGAGTA	ATAGGAGGGT	CAACAGGNG	TTAGAAGTTC	ACAAAGAAAG	300
GTCTCGAG						308

## (2) INFORMATION FOR SEQ ID NO:1450:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GAATTCGGCC	AAAGAGGCCT	AGCATGTTGT	GGCTGTTCCA	ATCGCTCCTG	TTTGTCTTCT	60
GCTTTGGCCC	AGGGAATGTA	GTTTCACAAA	GCAGCTTAAC	CCCATTGATG	GTGAACGGGA	120
TTCTGGGGGA	GTCAGTAAC	CTTCCCTG	AGTTTCCTGC	AGGAGAGAAG	GTCAACTTCA	180
TCACTTGGCT	TTTCAATGAA	ACATCTCTTG	CCTTCATAGT	ACCCCATGAA	ACCAAAAGTC	240
CAGAAATCCA	CGTGACTAAT	CCGAAACAGG	GAAAGCGACT	GAACCTCACC	CAGTCCTACT	300

```

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA    360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA    420
TACAAGTTAC CAATCACAGT CAGCTATTTT AGAATATGAC CTGTGAGCTC CATCTGACTT    480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC    540
TCGAG                                         545

```

## (2) INFORMATION FOR SEQ ID NO:1451:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

```

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTTGCTGTTT TCGAAGTGAG    60
GACTGAAGGG AACGAAAACCT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG    120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAAATGGCT TCTTACATCC TTTCTGGGGC    180
CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCCA GCAACCCCAAG    240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAA    300
TAATATTTC TACATGAAGG GAACCTCGA G                                         331

```

## (2) INFORMATION FOR SEQ ID NO:1452:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

```

GAATTCGGCC AAAGAGGGAA GGGAAAATTT CAAGTCAGAT AGAATTCTAT ATATACCATT    60
TCTTTGGAAC CTTAGCCCTT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT    120
CCTTAGTCCT CATGTCAGTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA    180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC    240
TGAAAACCTT TGCAGCACTC GAG                                         263

```

## (2) INFORMATION FOR SEQ ID NO:1453:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

```

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA    60
TTTGTATTAT TTTATGGTCT TTTTTCATCC TGATTTTGG TCATTGGTC CCGTCTTATG    120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCCC    180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTTCCTT CACTAGACAG TTATGTTGGG    240

```



```

GGTTATATAC CTTACTCCAA TCAAAGATTG AGCTGAGTCA GAACTCTAAG GGAGTTAAGT    300
TTTTGTGTCC TCTGGGGACC AGGGGTTCCA ACTAAGACTG TGATATTCAC CAGGATCCAA    360
TTTCCCGATG CCTCTTGAAC TCTTATTCTT ATCTTTTAA CACATCAAGG CAGCTGGTTT    420
GCATTTTCTT TTCTGTTTCT CTTTTTAGCT TCATCCTTTG CAGCTTTAGA AATTGACAGT    480
TGTCTTACAG GGAAAAGTAG CTGTGTAACA AGCTCATGTC TCTGCCTCTC TTCCACTGAT    540
ATCTTAGCCC CGCAGGAG

```

## (2) INFORMATION FOR SEQ ID NO:1454:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGAAATA CAATGATTTT    60
AAAAAAGATT TCCAAAGGCT TTTTCTTTT TTCTTTTTC TNGAGACAGG GTCTCACTCT    120
GTCGCCCAGG CTGGAGTGCA GTGACACAAT CTCGGCTCAC GGCAAGCTCC GCACTGCCCC    180
CTCAGGTTCA CGCATTCTT CCGCCTCAGC CTCCTGAGCA GCCGGGACCA CAGGCACGCG    240
CCACCACGCC CAGCCAACCT TTACATTTT AGTAGAGACG GGGCTTCACC ATGTTGGCCA    300
GGATGGTCTC GGTCTCTTCT GCCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1455:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

```

GAATTCGGCC AAAGAGGCCT ACTTGATGTC TGTGACCAC ACNTATTCGC AACTCCCTC    60
CCCTTTTGAA AATCCCTAAT AAAAAGTTGC TGGTTTTGC GGCTAGTGGG GCATCATGGA    120
ACCTACTGAC ATGTGATGTC TCCCCGGAT GCCCGGCTT AAAATTCTC TCTTTGTAC    180
TCTGTCCCTT AATTCTCAA GCTGGCCGAT GCTTAGGGAA AATAGAAAAG AACCTAGGTG    240
AATATTGGGG CAGGCTCCCT GATGAAATGA TATATATTCT TAAAATAAAC TTTTCATCTT    300
TGCATATACG TTTATATGCC GAGTTTCTC CAACCTTGTG TTACAGCACT TTGTATACTA    360
CATTCTAGCC ATACTAAACT CTTGCAGTTC CTGAGACATG TGCTGTATCC TATTTCTTCT    420
GGTCCTTTTC TCATTGATTA ACTACCTGGA GCATACTTTT AATTCAGTGT CAGCGCTCGA    480
G

```

## (2) INFORMATION FOR SEQ ID NO:1456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA ACACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG                                     393

```

## (2) INFORMATION FOR SEQ ID NO:1457:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTTGATCT TTAATTCAAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATTGT TTTTGGCT TTTTGAAC      180
TCATAAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCCTCCCA TCCACCAAGT      240
GACATTCTTT TCCAAAGAC ACATGG                                     266

```

## (2) INFORMATION FOR SEQ ID NO:1458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAGT TACTTTTCTAGA GTAGATACAG GGTTTTAGAT      60
CATTACAGTT TAAGTTTCTT GACCAATTAA AAAACATAG AGAACAAAAG CATATTTGAC      120
CAAGCAACAA GCTTATAATT AATTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTTTA AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTTACAGC AGTGCTCTCG AG                                     292

```

## (2) INFORMATION FOR SEQ ID NO:1459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATGA AATTCCAAT TAAATTATTT CACACAGCAT TTTTCCCTT      120
TAATTCATT AGTTTTTTT TTTCTTGGCC GACCCAGGCC AGGAGCTTAG GGAAATGAT      180

```

GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCCT CCCCTGCTCA 240  
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGAACATCT GATCCAGTGA TAGCAGTCA 60  
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTCCACT AGCAAATAA TCGTATTCAC 120  
TTTTACTCTC CCATTTTAA TTAATCTTC CTATTTTATT TCACCTCTC ATCTCTTCC 180  
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCATACT GTTTAATGAA TGTAATTGCA 240  
ACCACTCTGC AATTCCTAAG GTTTGTTTC TTTGCTTTT TCTTTTGTAG TCCATCTCTT 300  
TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 383 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGCACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60  
TAGCATTACT GACTTTAAAT TTTTGTAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120  
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAACTGGTT TGGTGGAGAG 180  
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTATGCTT 240  
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCT 300  
ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360  
TTTTACCTAT TCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 375 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60  
TGGTGAGGGC TTCTGGAAGT GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120  
AGAGAAGATT CTCACCATCG CTGATTACCA CAAAAGCATT TCTCCAAGTG GTTGCAGATG 180  
ACATGATTTC CCAAAGTGTT AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240  
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360  
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 174 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60  
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120  
AAAAGAGTGC TTGCCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCA AATGTATGCC ATTTGCTTGT 60  
TTTTTAAGTT GATTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120  
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60  
CTAAAAAATA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120  
GTATTTACTA CATTACAAT GTTGTGCAAT CATTACCTCT CTCCAGTCTT AACATTTC 180  
TCACCCCAA AGGAACCCCT AAGCGGTCAC TCCCACTCC ACTGTCTCCC ACAGCCCCTG 240  
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300  
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

```
GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT    60
GTGGGTTTTT ACTGCTCTGT TCACATGCCT TATTCAGACT TCTTGTGGTG GTC AATGCT    120
AGATGGTCTG TTGGAATTAT CTGCTGTCAT ACATCCAAA AGGTCTCACA GAGAG        175
```

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 350 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

```
GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC    60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA    120
TCCCTCATCT GGACTCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCTACAT    180
CAGAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGTCTT ACCTGCACGC TGTTGCCAAG    240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCTTT    300
CTTCCTTTG CCTCCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG        350
```

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

```
GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT    60
TG TAGAGACT GAATCTTTGC TGCTTGTAT AAATATTGCA GGGCATAAAC CTC CATTCA    120
TAGGTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC    180
TAGGTGTGGT CTAGAATTTA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTTTTTCT    240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCATA GTCGTAGTGC AGAGATATAA    300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTTCAAACC CTTCTAAGT TTGTGTGCTG    360
CTTTAACTTT ATTCACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG    419
```

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 612 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

```

GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC      60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCÄCTCTTCT      120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGC CTAÇTCGGGC      180
TTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC      240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGGTGA CCTTCTTGCC AACTGGTATC      300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTTGTATGGT CTCTGAGGAA      360
GGCGGCAACA GCTATGGGGA GGTCAAGGTC AAGCTCATCG TGCTTGTGCC TCCATCCAAG      420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGGAACC GGGCAGTGCT GACATGCTCA      480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT      540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCCT ATGTCCTGAA TCCCACAACA      600
GGCGCACTCG AG                                          612

```

## (2) INFORMATION FOR SEQ ID NO:1470:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

```

GAAAAGCCAA GACTTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT      60
TTGAATTTTG TATAGTACTA GGTTAGAACA TTGCTTAATC CTTTTAAAAA AAATGCATTT      120
ACGTAGAACT CGAGCAGGAT GTTTGGCCCC GATGTTTTTT CTTCATACTC TTCTGTCGCC      180
TCCTCCCAT TCTGCACAGT TCTCACCCAC TACTCTCGAG                                          220

```

## (2) INFORMATION FOR SEQ ID NO:1471:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

```

GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTTAAAGC AGGAAAAAAAA      60
AAACCATGTG GAAGATTAAG CTAGGCAGAG TGCCTGAAAA GCCCTCTGCA ATAAGTTGAG      120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT      180
CTATTATAAT ATAACATGA TAGATGTGAA TCTACCTCTT GGATTAAGGC AATAATTTTA      240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT      300
TCTTTAGCCT CTGCCTACAG ATTCAGTGA CAAAGCCATT CAGCTCGAG                                          349

```

## (2) INFORMATION FOR SEQ ID NO:1472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	AAAGAGGCCT	ACAACAAACC	ATTCTTCAGC	ACCTTTGCAA	AAACATCTAT	60
GTTTGTTTG	TACCTTTGG	GCTTTATTAT	TTGGAAGCCA	TGGAGACAAC	AGTGACAAG	120
AGGACTTCGC	GGAAAGCATG	CTGCTTTTTT	TGCAGATGCT	GAAGGTACT	TTGCTGCTTG	180
CACAACAGAT	ACAACATGA	ATAGTTCTTT	GAGTGAACCT	CTGTATGTGC	CTGTGAAATT	240
CCATGATCTT	CCAAGTAAA	AACCTGAGAG	CACAAACATT	GATACTGAAA	AAACCCCGC	300
GGTACTCGAG						310

## (2) INFORMATION FOR SEQ ID NO:1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC	TTCATGGCCT	ACAACTTTAA	GATTAGCTAC	TTTGAATAAT	CTCAGTAGGT	60
TCTGGGGCAC	AGGAGCTGCC	CCTCTGGTC	TGAGATTGG	CCATGGGGTG	ATTAGGACAG	120
GTATAGTGGC	ACAGAGTGT	AAAACCCCAT	AATGGTGTGG	ATTCTGGATT	GCTTAGTTTG	180
CATTTGACAA	GTGCATGCCT	GGGAGGAGGA	CTCCTCTTAG	TAAAGAGGAT	GGGAGGCAAG	240
AAGAGAGGCC	AGAGGCCAAG	ACAAGGTAAC	TTAGGCATAG	CATCAGGTTG	TCTCGAG	297

## (2) INFORMATION FOR SEQ ID NO:1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTAT	GCAACACTCA	GTTTATTTAA	TACTTACAAG	60
GGGAAATCAT	TAGAAACACA	GAAAACCACA	GTTGCAGCTC	GACATGGATT	ACAGAGTCTT	120
GGAAAAGTCG	GTATTTACAG	GCGTATGCCT	CCACCTGCTA	ACCTCCCAAG	TCTTAAAGCA	180
GAAAACAAAG	GCAATGATCC	TAATGTAAAC	ATTGTACCTA	AAGATGGCAC	AGGGTGGGCA	240
TCAAACAAG	AGTAACATGA	AGAAGAAAAA	ACACCAGAAG	TGCCACCAGC	ACAGCCAAAA	300
CCTGGGGTTG	CAGCTCCCCC	AGAAGTAGCA	CCTGCTCCCA	AATCATGGGC	CAGTAACAAG	360
CAAGGTGGGC	AAGGAGATGG	AATCCAAGTG	AATAGTCAGT	TTCAGCAAGA	ATTCCCAGC	420
CTGCAGGCAG	CTGGGGATCA	GGAAAAAAA	GAAAAGGAAA	CAAATGATGA	CAACTATGGA	480
CCTGGACCCA	GTTTACGTCC	ACCACTCGAG				510

## (2) INFORMATION FOR SEQ ID NO:1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAAA	GTCTCTTCTT	ACCACGCTCC	TCAGTGGCTA	GACATTTTCA	120
CGTGGCCAGA	AAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCCTCTG	180
AGCTTGGCGC	TCCCCATCTG	TATAGTGGAG	ACCTTGGGCC	CCCCTCTGTA	CGGAAGGGCC	240
GATGCGAAGC	TGCAGTAAAA	AAAGGCTCAC	ATGCTCCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTTAGAT	CATTCGTGTG	360
TGTGGATCAG	AGAAACGCAC	AAGTCCCTG	GCATCTCGAG			400

## (2) INFORMATION FOR SEQ ID NO:1476:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACCACATTTT	GTCAGCAGAG	AGCCTTTTAA	ACTTGATTTC	60
CAACTTCCTG	TTGTCTAAAC	GGAACCTCC	GAACGTAGGA	CTTATAGGGG	AAGCTGCTGT	120
GCATGTCAAA	AAACTACTA	ATCAGAATGA	GCTTTGTCAT	CCAGAGCCAG	AAGTGTGCA	180
GAAATTTTTA	TAATTTTGCA	ACTTCTTTT	TTACAAGGAA	CTTTTGTGCT	ACTACACATC	240
AGGACTTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTTTC	CTCCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTCCACTTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCGTGTG	CCTTTGTTAG	GCAGATTGG	AGGGGAGAGC	TCGAG		465

## (2) INFORMATION FOR SEQ ID NO:1477:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAAGAC	GTATTTTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAAGC	CTTCAGACTC	180
CTCCGCCCCA	GCCACTCTGC	ACCTGGGGCC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAAA	AAAGAAGGAA	TAAAAGTGTC	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGGAG	360
AGTGCTGGGC	GCTCGAG					377

## (2) INFORMATION FOR SEQ ID NO:1478:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC	AAAGAGGCCT	AGAGATTCAG	TTTATTCTAT	ACTCAGACTT	TGGTATCCCC	60
TTAGATGCCC	ATGTCAAAAA	TGAGAAAGTT	GGTGACATGG	TATGGCATT	TATTGCTTTT	120
TGTTTGTTT	CCATTGCTAC	TTTCACTCAA	ATTCCAAGGA	AATCACAGAA	GAAGGGCTTT	180
TGGTGACCTA	AAAGTAGAAA	TGAAAGCAAC	AAAATGCATT	CTGTCCAGCA	GTACACTGAA	240
GACAAAAAT	GTAGTTGAAA	AGTCTCAGGG	AGCGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC	AAAGAGGCCT	AATTTGCTTT	GCCAGTAGT	TGGAAGTGA	ACTCGACTCG	60
TGATGGTTCT	CCTGTCACCT	TGGTTGATAG	CAGCCGCTCT	GGTAGAGGTT	AGGACTTCAG	120
CTGATGGACA	AGCTGGTAAT	GAAGAAATGG	TGCAAATAGA	TTTACCAATA	AAGAGATATA	180
GAGAGTATGA	GCTGGTGACT	CCAGTCAGCA	CAAATCTAGA	AGGACGCTAT	CTCTCCCAT	240
CTCTTCTG	GAGTCACAAA	AAGAGGTCAG	CGAGGGACGT	GTCTTCCAAC	CCTGAGCAGT	300
TGTTCTTTAA	CATCACGGCA	TTTGAAAAG	ATTTTCATCT	GCGACTAAAG	CCCAACACTC	360
AACTAGTAGC	TCCTGGGGCT	GTTGTGGAGT	GGCATGAGAC	ATCTCTGGTG	CCTGGGAATA	420
TAACCGATCC	CATTAACAAC	CATCAACCAG	GAAGTGCTAC	GTATAGAATC	CGGAAAACAG	480
AGCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC	AAAGAGGCCT	AATTCATTCA	GTGTCATGA	GTTGAGTGCT	TACTACATGC	60
AAGGCACTCT	GCTAGTTATA	TTCTAATAAT	GCAGAGATAA	TTAGACATGG	TTCCCGCCCT	120
CAAGAAGCTC	ACAAAAGTAT	TCAGGAAATA	ATGCAGACTA	GTGATTTTGC	TATAAAATTA	180
TTTTTGAAGG	AAGCAGACAC	AGCAGTATTT	ACCTGTAGGT	GGAGCAAGTA	ATAAGCCATG	240
CTGTGCAATA	TATACATAAA	GCTTCTGCTT	CTCATGGGAA	TTAGTTTACA	GTGCTTGGAA	300
TGAGAAGGGG	AAGGAAAGAA	TTAACAAATG	CCAAGATTTC	TGGAGCAGAT	TGTACAGCTG	360
TGACTTTTGA	AAACAGAAAAG	TAAGACCCCTC	AGAAAACCAA	TGAAGTCTAA	GAGAAATAAA	420
ATTTAGTGGA	CAGGTATGAA	AAGTGTAATT	GCGCCTAACT	ACCAGATGGA	GACCTTCAGA	480
ATGGGCTATC	CTTAGAGTCT	AGTACATCAA	GAGACCCCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA	60
AAATGAAAGA GGGGCTGTTT CTA CTGATCC TGCAGACACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 337 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC AAAGAGGCCT AACTGAACT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG	60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT	120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA	180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT	240
TAAGAAATGAA NACGCTCATT TTATAAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC	300
TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 168 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT	60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTT	120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG	168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 478 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC	60
---	----

```

AGTGTGCTC CCACACAACA TGCAAACCCT CCTGCCGAGC TGCACCTTC GCCTGTCACG      120
GAACCTGGTG CTGAGTGTGG TGAGAGTGAA TCCTGCAGCA CGTGGCGCAC TGTCGGCCTC      180
TTTCATGTTT AGCTTTTGAT TGTGCTTATT GTCCATTGTG ATTTCTTCTT CTAAGTGTCT      240
GTTCAAGACT TTTCCGTCTT GGCTGGAGGT GGGAGGTGCC TGCTCCTGTG TTTCTGGCA      300
TCTTTCTCTG CTGTCTTTGT GTGTCTGCAC TCAGGGAGTT TCCCTGGGGT GTGTGCCTAG      360
AGAGGTGCTG GTTGTACATT TCAACGTAGG GACAGATTCC CAGCGTGTCT TTAAAGGAGC      420
TGTGCCGCTG TGTGCTCACT TGA CTGCCG GCGTTCTTGT TTCTCCAGGC CTCTCGAG      478

```

## (2) INFORMATION FOR SEQ ID NO:1485:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```

GAATTCGGCC AAAGAGGCCT ACACACTGCA AGAACAGAGC CAAGAACCTA CCATGTACCC      60
TTTACTTGGA TTTATCATTG CTGTTTGGCA CATTGCTTTT ATCATTCTTG TTATATTAC      120
ATATAGTTCC TTCCCTTGG ATTATTTGAG AACAACTGC AGAACTACA CCTCTTCCC      180
CGAAGAAGCTA GGCATTAGCA CATTACAAGA ATACGATGAT AGAGATCAGA AGTTAAATGC      240
TGATGAGATA TTCCTGTCTA ATCCACGAAC CTTATTTTCAT TGTATCAGT TGTCCCAACA      300
GCTCGAG                                         307

```

## (2) INFORMATION FOR SEQ ID NO:1486:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```

GAATTCGGCC AAAGATTGCT GTCCTTCAAC GTGTTTATTA TGAAGTTATT AGTAATACTT      60
TTGTTTTCTG GACTTATAAC TGGTTTTAGA AGTGACTCTT CCTCTAGTTT GCCACCTAAG      120
TTACTACTAG TATCCTTGA TGGCTTCAGA GCTGATTATC TGAAGAAGCTA TGAATTTTCT      180
CATCTCCAGA ATTTTATCAA AGAAGGTGTT TTGGTAGAGC ATGTTAAAAA TGTTTTTATC      240
ACAAAAACAT TTCCAAACCA CTACAGTATT GTGACAGGCT TGTATGAAGA AAGCCATGGC      300
ATTGTGGCTA ATTCCATGTA TGATGCAGTC ACAAAGAAAC ACTTTTCTGA CTCTAATGAC      360
AAGGATCCTT TTTGGTGGAA TGAGGCAGTA CCTATTGGG TGACCAATCA GCTTCAGGAA      420
AACAGATCAA GTGCTGCTGC TATGTGGCCT GGTACTGATG TACCCATTCA GGATACCATC      480
TCTTCTATT TTATGAATTA CAACTCCTCA GTGTCAATTG AGGAAAGACT AAATAATATT      540
ACTATGTGGC TAAACAATTC GAACCCACCA GTCCTCGAG                                         579

```

## (2) INFORMATION FOR SEQ ID NO:1487:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTTGT	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCAATGTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCCTGAATGT	CCTTTTGTAG	CCAGGGCATC	TTTCCAATAT	GAATTATTAA	240
GCCTTAACTT	ACATTTTTCG	ATAACTTATA	ACTCTCCATT	ATATATTTGG	TTACATTTCT	300
TAGATGTTTT	CAACATTCTT	TATTAAAGTT	ATTTTATCAG	CATCCGCTCG	AG	352

## (2) INFORMATION FOR SEQ ID NO:1488:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTTGTG	AGATACCTGT	60
TTTTTAAAC	TCCATTTTAG	AAAAGGAATT	ACTAGGACT	TTATATCTCT	TCGTTCAATA	120
TAATTTTAAA	GAAGAATTGT	TGAAAAGTAG	ATATGTTTGT	CCATTGCTGT	AGAATATTTT	180
GTACGTTAGC	TTGTCTCTTA	CAAAACTAA	ATGTGTTTCT	ACTTCTGATA	ATGTATGTCA	240
ATTTAAATTT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCACTG	CTTCTACCGT	TGTAATGGGT	AAAACCAAGG	360
GAAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

## (2) INFORMATION FOR SEQ ID NO:1489:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAAGGA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAAGAA	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCGGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGGAAGAAA	AGAAAAAAA	AGAATAAAGA	AAGGAGAGAT	GAAGGAATAA	AGGAAAAAAA	240
GTAGAAAGGA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAAGTC	GAG	293

## (2) INFORMATION FOR SEQ ID NO:1490:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTCGGCC	AAAGAGGCCT	AGTGCAACTA	CAGATAAGTA	AACTTCGACT	GGGTTTAGTA	60
ACACCTGTCT	TTAATATTG	TCAGTGTACC	TACATTGATA	ACATTGACCT	TTGGAAAAAT	120
TGGACTTGTA	TTGTGTTATT	TCTCTAGCAT	ATTAGTCCTA	AAAAAGTGTG	AGTAATAGGA	180
GATGGAGAGG	TGTTTGTGGA	TTGTCATTCT	GTGGTTCCTA	CAGCATTCAA	GTTGCGTCCG	240
TACGCTCGAG						250

## (2) INFORMATION FOR SEQ ID NO:1491:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

GAATTCGGCC	TTCATGGCCT	AATTCTTAGA	AATAAGCCA	CTATCATGCA	GGTTATTTAC	60
AAGTAAAAAC	ATGGAGTCAG	CCCAGTAGAG	AAACGTTCAA	ATAGTGTGGC	TCCTGCTCTG	120
CCACGTTCTG	TTTATGACTT	TGGATATTTT	ATTATCCTT	TCTGGGGTAG	TTTTTCAACT	180
TTAAGGTCCT	AATAAACTTT	TAGATTTTAT	GACCTGTCCT	CTTTAGCCCT	GTAAGATTTA	240
AATATTATAA	AGAACCTGAT	TTCAAAGACA	CTGGTAAACT	TGGACAACTA	AACAAGTCCA	300
AGTATGGTAC	TTATTTGTGT	GTGTGCATAT	ATTAACCTTA	TGCATATGCT	GTTTTACAC	360
CTATTTAAAC	TGTTTTTGAA	AAACGTATAT	ATCAGTTTTT	GGAAAACAGA	AGAAGATTTT	420
AAACGGCTAC	TCGAG					435

## (2) INFORMATION FOR SEQ ID NO:1492:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 360 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

GCGATTGAAT	ACATGTTCAA	TAAGGACAAT	GGACAGGCAC	CTTTTACCAT	CACTCCTGTG	60
TTTTCAGATT	TTCCAGTCCA	TGGGATGGAG	CCCATGAACA	ATGCCACCAA	AGGCTGTGAC	120
GAGTCTGTGG	ATGAGGTCAC	AGCACCATGT	AGCTGCCAAG	ACTGCTCTAT	TGTCTGTGGC	180
CCCAAGCCCC	AGCCCCCACC	TCCTCCTGCT	CCCTGGACGA	TCCTTGGCTT	GGACGCCATG	240
TATGTCATCA	TGTGGATCAC	CTACATGGCG	TTTTTGCTTG	TGTTTTTTGG	AGCATTTTTT	300
GCACTGTGGT	GCTACAGAAA	ACGGTATTTT	GTCTCCGAGT	ACACTCCCAT	CGATCTCGAG	360

## (2) INFORMATION FOR SEQ ID NO:1493:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 271 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG      60
ACTTTCTGTA GTCCTTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATTGT GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTTCTTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGTCGA G                                271

```

## (2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTGAG AAATTTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTCACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGGA ATCTCATTTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTTCGTTGGA CTAAGGGTCT CAGTTCCTCA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCCTCCC CAGCATAACT GTTACTTCA TCAAAACAAA      300
CAAACTCGAG                                310

```

## (2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTTA GATTGTCTGC CCTTCCTCTT CCTCTTCTCT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                138

```

## (2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATTTGT TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTGTAGCC AG                                102

```

## (2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```

GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCC CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTTCCGC CCTATAGTAA      360
ACGCAAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTACTTCCTC      420
TAAAGAGGAT TGCACTCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG                                                                    483

```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```

GAATTCGGCC AAAGAGGCCT AAAATTTCAA TAGGCTATAG AGTTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG                                                                    144

```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```

GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTCNTT CTTCTTCTT GGGGGTTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTCA AGTGATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCA      300
CCACCATGCC TGGCTAATTT TTGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTTCAAGTGA TCCACCTGCC TCAGCCCCC GACTCGAG      418

```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC	AAAGAGGCCT	ACAAAGACCA	AGGTATCACA	TTCTGCCATT	AGCTGCTACC	60
TCTCCCTTCC	CCATTTTCAG	ACAGATTGAG	CCCACCTTTT	GTGTCCTCCT	CTGCTCTTAA	120
GCTGTTTCTC	ATCGTGGGTG	CTCAGCAACT	TGTCTGCTCT	CACTCTAGTT	TCTATTTGCT	180
TCCCTGAAAT	TAGCCTTTAA	CTATGCCCAG	ACAAGCCAGA	GCCTTGCCTA	AACTTCTAAT	240
TCCTCTGTGC	TTCTTAGTGT	ATCCTTTCTG	CCTGCTTGCC	TGCCTGCCTT	CCTGCCTGCT	300
TGCCTGCCTT	ACTGACCCTT	TGCCCCACGC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTCGGCC	AAAGAGGCCT	AAACCGTCGA	TTGAATTCTA	GACCAGCCTC	ATCTCCTGTT	60
CCTCTCTCCC	TCCCAACTAT	GTTGGCCTCC	CTGCTGCTCC	TCGAG		105

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 701 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTCGGCC	AAAGAGGCCT	ACTGTGAACC	TAAAACTCCT	ATAAAGAAAA	GTAAAGTCTT	60
AAAAACAAAC	AAATACACAG	CAACAATCTT	ATTTTCCCCA	GCCTGTCTTA	TGTTAGGGTG	120
CAGATGTGAT	TTCTGTGTGG	CTAATCAGAT	GCCCTTGTGT	GAGAGACTGA	TTTGAACAGA	180
GGCAGGGGCA	TCCATCTTTC	TAGTGTCAGT	CACAGCAGAA	GCAGTGAGGT	CCTGGTGTCT	240
GTCGCTGCAG	TGGTGGCTTT	TGATACAGGA	GTTCCTGAT	GGCAGTAGCT	TCTTTGTGGG	300
TTCAGTTCTG	TTGTGTGGTT	CTGCAAGTTC	AGCTTAGAGT	CTGTTTCTTC	AGCTGTTTCA	360
ATGACCCTCT	GAGCTGTCTA	CCATGAAAAA	TTCTATCCTG	CTTACACTAA	TTAGAGCCAA	420
TCCTGTTATT	TACAAATGAA	TATCCTGACC	AGTAATGAAG	GTCTAGACTT	AACTGTAATA	480
TTTTATGACT	TAAATTGTTG	GCATATGTGA	AAACTTTTTC	TTTATTCTAA	ACTTTTTTGT	540
TGTTGTGTGA	AAATAAAACA	TTTATGAAAA	GCGCACCAAA	AAGGATAACA	AATGAGAGTA	600
ATGCAACATA	CAGGCACCAG	CAACTCAGGC	CAGGGAGATG	ATATATGAGC	ATCCCCAATC	660
TCCCTTTTAC	ACTCCCTCAA	ATAACTCAAT	CAAGACTCGA	G		701

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 257 base pairs



(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

GAATTCGGCC TTCATGGCCT AGGAAGTAGG TGACTTTGGG GCTCATCTCA CAAGTTTCCT	60
TACACTTAGG GATCAGTCTT TTGCTTCCTG TTGTCCTCTG CCTGAAAGTA GTTGCCAAGT	120
TGTACTGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG	180
CCAGATTTTT TTTTAACAAA TTTATTAATC AATACATTTT GTCCATGTCT ACAGTTGTTT	240
ATGGGGGAGA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

GAATTCGGCC TTCATGGCCT AGGGGACCTT GGGAGAATGT AATCCCTGCC CCTAGTCTCA	60
GTTTCTGCAT CCACGGAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTCTTTTT	120
TTTTTTTTT AAAAAAAAAA AAAAAAAAAA AAAGTACGTT ATGTTTTTTCAG ATAAGAACAC	180
TTCTTCATGG ATGACTTGAA ATAATTGCCA TGGTCCCTAA GTTTCCTCT CTGTAGATGA	240
ATGATATAGC TCAATATCTA AGCAGTGGAT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCCTCCC AAGCTGCTGG TATTACAGGC	60
GTGAACCACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAAATG AAAGCAGAGG	120
AATGGTGGCA GGAAGCTGA CATTTTAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT	180
TCTTACTGTT AGAATAAGTG GTAACCTGCC AAGTCCACAT TGCTAGATGT CAGAGCAGAA	240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTCAG AGCATTAACA ATTCAATTCA	300
GTTAGTGTTT ATTGAACACC TATTGTGTTT TGGCCCTCGA G	341

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

```

GAATTCGGCC TTCATGGCCT AGGCATTTTG TCTCTAGAAT TACCCACCCG TTCCTGCGCT    60
CTACGGTTCT CCATGCCCCC TCCAGTTTGG GGGTCTAAAC CGAACAGGAG AGGTGCAGGG    120
GACCAGGAGG TGTCCTGGCA CAAAGGTTTCG GGGGTCTCCC TGGCAAGGGG TCCCAGGGCC    180
TGGAGCCCGA GGCCCAGCCA AAAGCACACA GCATCAAAAC ATGTTTTTAG TGGGAAGCTC    240
CAGGCCCTGC CCCTCCCCGG GGGCTCGAG                                     270

```

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

```

GAATTCGGCC TTCATGGCCT AGAGCAGGAA GATTGTGTGA GTGCTGGGGT TTGGGGGTGC    60
CCAAGTTGGG AACCAAGTGA GGGAGAGAGA GGTAGGAGGT AGATGGATGG AGATCAAAGG    120
CCAGGCCCTGT GGCCAAGGGG GCTGCTAACC CTTCAACCCT GTGTTAGCCT GTACACTCAC    180
CAGGCCAGGC TCAGCAGGCG GGCTGTTTAC CTCTGGCAG CAAATGGTCC AGAATGTGCC    240
CTCGCTGCAG CCCAGCTGGC TCCAGAAGGG GGACCACAGA GGCTGGAGCT ATGCATGCAC    300
AGTGCTTTCT CCCAACCTTG CTTCTGAGAA AAGTGTCCT GCGAGGGCCC TGGAGGAGGG    360
AGCTAGGGAC CAGCAGAAGG GCCTAGGTTT CTGTAGCATC ATTTTtagcc CTGGCTGAAT    420
CTGGGAAGCA CCTGGTGGCT TTAACATTCC CGTTAGCTCG AG                                     462

```

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

```

GAATTCGGCC TTCATGGCCT AGTCACAATC CACTTAAAGA AGTTTGGTTA TATTTCAGTG    60
AAAATTTTCT TCCAGAGTAG GTTTTTTTTC GTGGGTTGGG GGGTAACTTT ACTACAATTA    120
GTAAGTATGG TGCAGAAATT CATGCAAATG AGGAGTGCCA GCAGTGTGAT AATTTAAACA    180
TATTTAAACA AAAACAAAAA AAATGAATGC ACAAACCTGC TGCTGCTTAG ATCACTGCAG    240
CTTCTAGGAC CCGGTTTCTT TTACTGATTT AAAAACAAAA CAAAAAATAA TAAAAAAGTT    300
GTGCCTGAAA TGAATCTTGT TTTTTTTTAT AAGTAGCCGC CTGGTACTG TGTCCTGTAA    360
AATACAGACA CTTGACCCTT GGTGTAGCTT CTGTTCAACT TTATATCACG GGAATGGATG    420
GGTCTGATTT CTTGGCCCTC TTCTTGAATT GGCCATATAC AGGGTCCCTG GCCAGTGGAC    480
TGAAGGCTTT GTCTAAGATG ACAAGGGTCA GCTCAGGGGA TGTGGGGGAG GGCGGTTTTA    540
TCTTCCCCCT TGTCGTTTGA GGTTTTGATC TCTGGGTAAA GAGGCCGTTT ATCTTTGTAA    600
ACACGAAACA TTTTGTCTT CTCAAGTTT CTGTTAATGG CGAAAGAATG GAAGCGAATA    660
AAGTTTACT GATTTTGTAG AACTAGACT CGAG                                     694

```

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 490 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```
GAATTCGGCC TTCATGGCCT AATGAGGTTT TATCTAGAGG TGATGGGAGA CAGTGACAGA    60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC    120
ACAAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA    180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCACTTGC TTGCCCGCCA    240
CTTACCTCCT CTTGTGCGGC CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC    300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT    360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTGCTT    420
CCTTACAGTT TTACTGTTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTCAGCCAC    480
CACACTCGAG                                     490
```

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```
GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCCT CTCCTCTCCA CTCACGCTCC    60
TCCCAATCCC CAAGGTCCTC TCATTCCAC CTTCTCCCT TCCTCTCCTC ACGCTCCTCC    120
CTATCCCCGA GTCCTCTCT CATCCCTACC CTCCTCCCT CCACTCACGC TCCTCCCAAT    180
CCCCAAGGTC CTCTCATTCC CACCTTCCTC CCTTCCTCTC CTCACGCTCC TCCCTATCCC    240
CGAGCTCCTC TCTCACTCCC TCCTCTCTCT CATGCTCCTC CCCCCTCTCC TCATGCTCCT    300
CCCCATCCTC GAG                                     313
```

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```
GCCGGGTGGG CCGGAGGTGG CGCGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA    60
GAGCGATGTG GGGCGCGGCA GGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCTCTCCG    120
GGTCTGGGAA TCTGCTGAAC TCCTTGCTCT TCTTGGGGTC CCTCGAACGC CCCAGCTAAG    180
AAGGGCGGGG GCCTTGCCAG GGCAGGAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC    240
TGTAAGAAAT TGTTACAGTG GGAGCCTGTC CACATGGGCT GTACTAAGGA TCTGGCACGA    300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCGTTGGA AGGGTCACCT CGAG          354
```

(2) INFORMATION FOR SEQ ID NO:1512:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 407 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```
GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCCG AGTCTGTTCC CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGCTCC CCGCCGCCCC AGTTCCTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGAAAGATC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAGGAA      360
AAACATGTTA AGACCCTAGA CTTGTATATT GACACACAGA ACTCGAG      407
```

(2) INFORMATION FOR SEQ ID NO:1513:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 422 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```
GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TCAAATATT GCAAAAGGAT      60
GTGTGTCTTT CTCCCCGAGC TCCCCTGTTC CCCTTCATTG AAAACCACCA CGGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGGAG      240
AGATTTTGTG ATCACATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATAACTAC      300
TGCATAATAT GGATACGCCT TATTGATT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTTCCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTTGCCCC      420
AA                                                                                   422
```

(2) INFORMATION FOR SEQ ID NO:1514:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 485 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```
GAATTCGGCC AAAGAGGCCT ATGGAAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGGAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTtag GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTcAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480
```

TCGAG

485

## (2) INFORMATION FOR SEQ ID NO:1515:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

GAATTCGGCC	AAAGAGGCCT	AGGCACAGAA	GGGTGGTGAG	TGTGATCAAA	TCTAGTCTCA	60
CTCCCACTTT	TTAGTCTCAC	TCCTACTTTT	GTCCACCACC	CAGGCACGGA	GAGAAAGGAA	120
TGTTTAGCAC	AAGACACAGC	GGAGCTCGGG	ATTGGCTAAA	CTCCCATAGT	ATTTATGGTG	180
GCCGCCGGCG	GGGGCCCCAG	CCCAGCTTGC	AGGCCACCTC	TAGCTTTCTT	CCTACCCCAT	240
TCCCGGCTTC	CCTCCTCCTC	CCCTGCAGCC	TGGTTAGGTG	GATACCTGCC	CTGACATGTG	300
AGGCAAGCTA	AGGCCTGGAG	GGTCAGATGG	GAGACCAGGT	CCCAAGGGAG	CAAGACCTCG	360
CGAAGCGCAG	CAGCCCCGGC	CCTAGGCCTC	TTTGGCCGAA			400

## (2) INFORMATION FOR SEQ ID NO:1516:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

GAATTCGCGG	CCGCGTCGAC	GTCGACGCGG	CCGCGAATTC	GGCCAAAGAG	GCCTACCCAT	60
GTCAATCAAG	ATGGGTGATT	ATGAAATGCC	AGACTTCTAA	AATAAATGTT	TTGGAATTCA	120
ATGGGTAAAT	AAATGCTGGC	TCGAG				145

## (2) INFORMATION FOR SEQ ID NO:1517:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

GCTGGACCTC	CTGTGCAAGA	ACATGAAACA	GCTGTGGTTC	TTCCTTCTCC	TGGTGGCAGC	60
TCCCAGATCG	GTTCTGTCCC	AGGTGCAGCT	GCGGGAGTCG	GGCCCAGGAC	TGGTGAAGCC	120
TTCGGAGACC	CTGTCCCTCA	CCTGCACTGT	CTCTGGTACT	TCCGTCAGAA	GTGTTAGTTA	180
CGACTGGAGT	TGGCTCCGGC	AGTCCCCGGG	GAAGGGACTG	GAGTGGCTTG	GAGAGATTGA	240
TTACAGGGGG	AGAGGCAATT	ACAACCCGTC	CCTCGAG			277

## (2) INFORMATION FOR SEQ ID NO:1518:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTTG TGTGTAGC	60
TGTTATTAT GCAGACTTA TTATGTGGTT GTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTTGT TTT TGTGGTGGCG CTTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCTTGAGA GAATTAATAG TAGGTTTGTG GTACAGGGAG GGAGATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAACTAGAG AGCTGCACAG CAACATAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAAT ACTCAGCTGA GTACTGATCA ACATATATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AACTGTACC TGTTCCACC AGCCAACTG GAAAAACCTC AGGATTCATG	480
GGGTACTCAG AAAGGACTTG CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAATCCC ATCCACTCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID

NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172,

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.



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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>C12N 15/12, 5/10, C07K 14/47,</b> <b>C12Q 1/68, A61K 38/17</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 98/45437</b> <b>(43) International Publication Date:</b> 15 October 1998 (15.10.98)
<b>(21) International Application Number:</b> PCT/US98/06956 <b>(22) International Filing Date:</b> 10 April 1998 (10.04.98) <b>(30) Priority Data:</b> 08/837,312 10 April 1997 (10.04.97) US <b>(71) Applicant:</b> GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). <b>(72) Inventors:</b> JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). <b>(74) Agent:</b> SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).	<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 12 November 1998 (12.11.98)	
<b>(54) Title:</b> SECRETED EXPRESSED SEQUENCE TAGS (sESTs)  <b>(57) Abstract</b>  Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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# INTERNATIONAL SEARCH REPORT

International Application No

PC./US 98/06956

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N5/10 C07K14/47 C12Q1/68 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 527 896 A (WIGLER MICHAEL H ET AL) 18 June 1996 SEQ ID no. 31, Accession no. I22491 ---	4
A	WO 97 07198 A (GENETICS INSTITUT) 27 February 1997 see the whole document ---	1-8
A	WO 97 04097 A (GENETICS INST) 6 February 1997 ---	1-8
A	ADAMS M D ET AL: "3,400 NEW EXPRESSED SEQUENCE TAGS IDENTIFY DIVERSITY OF TRANSCRIPTS IN HUMAN BRAIN" NATURE GENETICS, vol. 4, no. 3, July 1993, pages 256-267, XP000611495 see the whole document ---	1-8
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

3 July 1998

Date of mailing of the international search report

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# INTERNATIONAL SEARCH REPORT

International Application No

1.57/US 98/06956

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 cited in the application see the whole document ---	1-8
A	JACOBS K ET AL: "A NOVEL METHOD FOR ISOLATING EUKARYOTIC CDNA CLONES ENCODING SECRETED PROTEINS" JOURNAL OF CELLULAR BIOCHEMISTRY - SUPPLEMENT, vol. 21A, 10 March 1995, page 19 XP002027246 see abstract ---	1-8
A	WO 90 14432 A (GENETICS INST) 29 November 1990 see the whole document ---	1-8
A	WO 96 17925 A (IMMUNEX CORP) 13 June 1996 see the whole document -----	1-8

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 06956

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see further information sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see further information sheet, subject 1.

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

International Application No

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